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1 3 JUL 1978

MEMORANDUM FOR: Mr. Scott Breckinridge

Principal Coordinator/HSCA

VIA

O/EXO/CI

FROM

Raymond A. Warren

Chief, Latin America Division

SUBJECT

: Yuriy Ivanovich MOSKALEV

1. Attached is a file folder titled "Yuri" which contains informal and preliminary research based on a theory that Yuriy Ivanovich MOSKALEV might be identifiable with the "unidentified man" observed entering and departing the Soviet Embassy in Mexico City, Mexico, in October 1963.

undertook to research the theory that MOSKALEV might be the unidentified man as a result of the indepth study she conducted as the Task Force Leader of this Division's efforts to determine if there could have been Cuban complicity in the John F. Kennedy assassination.

- 2. Although the material contained in the attached folder is entirely theoretical and does not constitute an official file or position of this Division or Agency it may be of interest to Mr. Blakey and Mr. Cornwell of the HSCA.
- 3. It is requested that you review the material contained in the file folder and, if you consider it appropriate, make the material available for Messrs. Blakey and Cornwell to review with the understanding that it is a theoretical unofficial research undertaking.

1 Attachment as stated

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Principal Coordinator/HSCA

VIA

O/EXO/CI

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SUBJECT

: Yuriy Ivanovich MOSKALEV

1. Attached is a file folder titled "Yuri" which contains informal and preliminary research based on a theory that Yuriy Ivanovich MOSKALEV might be identifiable with the "unidentified man" observed entering and departing the Soviet Embassy in Mexico City, Mexico, in October 1963. undertook to research the theory that MOSKALEV might be the unidentified man as a result of the indepth study she conducted as the Task Force Leader of this Division's efforts to determine if there could have been Cuban complicity in the John F. Kennedy assassination.

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Raymond A. Warren

1 Attachment as stated
DDO/C/LA/STB, (X9127) (13 Jul 78)
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April 1977

SUBJECT: Theory re MOSKALEV, Yuriy Ivanovich and
Unidentified Man

That Yuriy Ivanovich MOSKALEV might be identifiable with the "unidentified man" going into and coming out of the Soviet Embassy in Mexico City in October 1963. The "unidentified man" was recently identified by SLIPSTREAM as a KGB type by name of "Yuri" whom he knew in Moscow in 1964.

- According to travel records MOSKALEV was in the USSR in 1964; in the U.S. in October 1963.
- MOSKALEV functions officially as a Soviet scientist and often attends international conferences. He has been in contact with known GRU Soviet diplomat in the U.S.

MOSKALEV bears a striking resemblance to composite of "Saul" in book <u>Appointment in Dallas</u> who claims he was involved in the assassination of President Kennedy. "Saul" claims:

- he crossed border into U.S. illegally and was in Dallas on 20 November.
- That he had been to Mexico City, had a contact in Soviet Embassy there, in 1963, and that he knew the identity of OSWALD because he (OSWALD) had been fingered to him in Mexico City.

- that OSWALD was involved in the Kennedy assassination plot, but that he, "Saul", fired shots that killed Kennedy.
- that two hours after the assassination he, "Saul", was out of the U.S. That he used limp as a disguise.

QUESTIONS

- 1. Could MOSKALEV be "Saul"?
- 2. Could MOSKALEV, therefore, be mystery man who boarded plane in Mexico City for Havana on 22 November 1963?
- 3. Was assassination a Soviet comspiracy without Cuban knowledge?

RECOMMENDATION

- 1. Can we obtain voice tape of MOSKALEV, since he has delivered speeches at scientific conferences in U.S. and abroad?
- 2. If so, could we arrange to have McDonald (unwittingly) hear it, to see if he recognizes it as that of "Saul"?

LAD/JFK Task Force

- 1. Can we find , hotc that PENKOVSKY identified of MOSKALEVSKIY.
- 2. May I see PENKOVSKIY's 201 file for period 61-63?
- 3. Get photos and check out MOISEEV and BABKOV.
- 4. Via CI Staff, find out if we can show photo to DERYABIN and ROSTVOROFF?
- 5. Could MOSKALEV be Dept 13? Could OSWALD have met with him in Mexico City clandestinely in 1963?

26 March 1977

SUBJECT: Juriy Ivanovich MOSKALEV

DOB: 23 July 1920

POB: Iguamnovo, USSR

HGT: 172 Centimeters

Hair: Brown (medium light)

Eyes: Gray

Wife: Married to Vera Nikolayevna STRELTSOVA

Children:

Education: Unknown

Misc: Became a Communist Party member in 1951

Was allagedly imprisoned during war because of his German descent or for black market dealings.

Occ: As of May 1973 was with Institute of Biophysics of the Soviet Ministry of Health. (Dr. of Medical Sciences.) Prof.

1922 - Family moved to Leningrad.

48-70- Lived in Moscow

1958 - Became head of Division of Institute of Biophysics, Soviet Ministry of Public Health

1951-53 Head of Patho physiology Lab, Inst. of Biophysics.

1952 - Last half of year, had a month's TDY at Biophysical Lab. in Moscow.

When source (Dr. Wilhelm MENKE)STIB, left as Chief of Pathphysiological Lab. at Sungol in Oct. 53, MOSKALEV took that position. He reportedly was not well qualified.

Personal Misc.

- 1. Very adept diplomat finds it easy to adopt conversation to group he is with.
- 2. Excellent chess player, patient with both adults and children.
- 3. Has dasha near Moscow.

7 7 1 f

4. Reads, writes, and conprehends English well, but speaks it with less proficiency. Reportedly speaks it much better after few drinks. (He is careful about drinking, if he drinks at all, in relation to attending conferences.)

26 Dec 62

CIA=A-3.246.539

Re International Conference on Diagnosis and Treatment of Radioactive Poisoning, Vienna, Aust. 15-18 Oct 62. "Most interesting aspect of meeting was conduct and contributions of Prof. MOSKALEY of USSR Academy of Sciences. His subject was listed as "Uptake and Retention of Plutonium in Man"; no abstract was presented. When he spoke he changed the title to "Problems of Kenetics of Uptake and Retention of Radioisotopes." His paper presented nothing new and can be described as elementary. He apparently spoke no English.

19 Jan 63

OOB 3,248,156.

Information from another source on the above conference. Dr. D. J. SEMENOV and Dr. I.T. TRUGUBENKO? were invited to attend. The Soviets sent instead, Prof. MOSKALEV. He was bright, but not individual who should have been sent representing the USSR at this meeting. Was was said to be his first time out of the USSR. / CDH comment - not so.7

9 July 63

DF-440

Source: AEDAZZLE-1 (doi 1961) identified photo(not by name, nor was name supplied) as that of Col. Yuriy Ivanovich MOSKALEVSKIY Air Force Col. and GRU Officer in Information Directorate of GRU who attended a meeting in London in May or June 1961.

21 Aug 63

OOB 3,271,609

MOSKALEY participated at meeting of IAEA panel on Toxicity of Incorporated Radio-nuclides, Vienna, Austria 4-8 June 63.

18 Oc 3 63

OOB 3,278,069

Re Symposium in Vienna, Austria from 26-31 August 63. The Soviets sant a small three or four member delegation headed by MOSKALEV "a very personable and diplomatic gentleman." At the end of the conference MOSKALEV voiced his dismay that the Soviets had misunderstood the exact point of the meeting and had presented very minor papers.

3 Dec 63

OOB 3,283,411

Symposium on Radiological Health and Safety in Nuclear Materials Mining & Milling, Vienna, Austria late Aug 63. "Due to misunderstanding in USSR, topics covered by symposium were not known sufficiently in advance for Soviet scientists to contribute papers on other than nuclear toxicology." All papers were given by Dr. L. N. BURYKINA in the absence of MOSKALEV et al.

10 Dec 63

FR:

30 Dec 63

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OOB 3,286,351

MOSKALEV atttended Symposium on Radiological Health and Safety, Austria, 26-31 Aug 63.

23 Jan 64

OOB 3,288,475

IAEA Symposium on Neutron Irradiation, Brookhaven, Long Island, N.Y. Oct 63. MOSKALEV, one of the Soviet delegates. was frequent commentator on other people's work and made a practice of denigrating their reports with respect to radiation lethality. Sources (3 U.S. scientists) were asked if they thought MOSKALZV's objectives were motivated from anything more than genuine scientific position. responded - "Who can say?" MOSKALEY, both from papers he gave and his questions and comments in discussion, indicated he was very sharp The paper he gave presented no new data. His paper said nothing specific.

24 Oct 66

OOB 321,15482-66

About one third of the Soviets expected at the Third Int'l Congress of Radiation Research put in appearance. The papers were disappointing. A paper written by MOSKALEV and V.A. STRELTSOVA was not impressive.

16 Oct 67

OOB 321,30340-67

MOSKALEV attended the Second Int'l Symposium on Delayed Effects of Bone Seeking Radio Nuclides, Sun Valley, Idaho, 12-14 Sept 67. He presented an interesting paper. He was not exprected at the meeting and came alone, arriving two days early. He had furnished no brief and it was a surprise tohear his paper. He understands English reasonably well, but speaks it less well. Therefore, his appearance alone at the conference was even more unusual. He became very interested in visiting a certain U.S. facility and pursued arrangements to visit it. U.S. Gov'

clearance and permission to visit were obtained, but he "backed-out" (after all had been arranged) saying it was too much trouble for U.S. persons and authorities concerned.

16 Oct 67

OOB 321,27474-67

MOSKALEV participated in Second Int'l Symposium on Delayed Effects of Bone Seeking Radio Nuclides, Sun Valley, Idaho, arriving two days early. He had travelled alone to Sun Valley and apparently was able to use his knowledge of English language to get along on his own. However, he complained to Chairman of conference that he did not know enough English to read his paper which also required condensation because it was too long for the time allowed. A colleague who had known MOSKALEV from previous meetings said MOSKALEV's knowledge of English improved greatly after a few drinks.

- ings said MOSKALEV's knowledge of English improved greatly after a few drinks.

 However, he did not drink at all during this conference. He did mention that he had written the English version of the paper he presented himself. A respected U.S. scientist with nore expersence than MOSKALEV said he frankly did not believe MOSKALEV's findings. (Said this in private.) MOSKALEV attempted to make propaganda of a report by a West German. MOSKALEV left the conference a
- N.B. little upset. He took copious notes on all papers, which indicated he understood what was going on. He also took many pictures with a 35 mm camera. From questions he asked in private, it was obvious he understood English quite well. Considerable time was spent in arranging visit to a U.S. lab. in route to his home. He took a different route, without telling anyone of plans, and did not visit the lab.

1 Feb 70

Br

1 Jul 70

OOB 321/17309-70.

Fnu MOSKALEV and P.V. RAMZAYEV were scheduled to attend the Biology & Ecology of Polonium and Radiolead Conf. Sutton, U.K. 30 Apr to 1 May 70, but apparently were not permitted by the USSR to attend.

24 Aug 70

OOB 321/20573-70

MOSKALEY was among Soviet delegation to Second Int'l Congress on Radiation Protection, Brighton, U.K. 3-8 May 70. MOSKALEV personally attended virtually every session and was very busy asking many questions. He asked all questions through an interpreter, but when answers were given, in English, he always seemed to understand without benefit of his interpreter.

13 Nov 70

OOA(S) 322/33488-70

Sept 70 MOSKALEV visited a U.S. facility devoted to research in field of nuclear medicine. "It is obvious that he is a careful and trustworthy worker." Visited Brookhaven in Oct 63; Sun Valley in 67; and Hanford Biology Symposium 69.

U.S. Embassy Moscow Airgram

26 Sept 71

Science Berkeley Lab. 600254

NENOT and MASSE, participated at the same Transuranium Biology Symposium at Hanford during week of Sept 26. They were in Man Francisco by chance at the same time and desired to visit Berkeley on the same day. They did not travel to the conference together. It all seemed to be coincidental. Drs. MOSKALEV and MASSE reportedly understood more English than they could speak. Dr. MOSKALEV was the USSR's rep. on ICRP internal dose committee.

23 Dec 71

OOE 324/37776-71

Dr. Yuriy I. MOSKALEV, Inst. of Biophysics, Min. of Public Health, visited several U.S. biological and biophysical research facilities. During that time it was learned that he was chairman of the USSR equivalent to the U.S. National Council on Radiation Protection. In this position Dr. Aleksey A. MOISEEV (Central Advanced Institute for Training of Physicians, Moscow) was MOSKALEV's secretary.

25 Oct 71

Letter to U.S. Atomic Energy Commission from

12 May 73

U.S. Embassy Moscow files

Y,

Chris Hopkins

SUBJECT: Passports Used by MOSKALEV, Yuriy

MOSKALEV, Yuriy Ivanovich

MOSKALEV, Yuriy Mikhailovich

| 1957 | PP# Unknown |
|------|-----------------------|
| 1962 | S-012960 |
| 1963 | S-022766 S-012960 |
| 1964 | S-022766 |
| 1965 | S-022766 |
| 1967 | 0-113459 |
| 1968 | T-286915 |
| 1970 | 0-286915 S-201222- |
| 1971 | S-201222 |
| 1972 | O-068765 S-201222 |
| 1974 | Unknown |

MOSKALEV has following birthdates:

23 July 1920

17 January 1920

21 July 1920

1930

| NAME | DPOB | OCC | PP# | DATE | FROM-TO | |
|----------------------------|----------------|-----------|----------|-----------|---------|---------|
| MOSKALEV, Juriy Ivanovich | - | Chem | 2000 | [Sept 57] | USSR | France |
| MOSKALEV, Yuriy | 1920 | ego. | S-012960 | FOCT 627 | Aust. | USSR |
| MOSKALEV, Yuriy | 1920 | 50 | wade | Oct 62 | USSR | Aust. |
| MOSKALEV, Yuriy | 23/7/20 | Biol. | S-012960 | Oct 62 | USSR | Aust. |
| MOSKALEV, Yuriy | 23/7/20 | Phys. | S-022766 | May 63 | USSR | Aust. |
| MOSKALEV, Yuriy | 1920 | des | S-022766 | 30/6/63 | Poland | Aust. |
| MOSKALEV, Yuriy | 1920 | data | S-022766 | 8/6/63 | Aust | USSR |
| MOSKALEV, Yuriy Ivanovic | h ₹3/7/20 | Scie. | S-012960 | Oct 63 | USSR | USA |
| MOSKALEV, Yuriy Ivanovich | 23/7/20 | Scie | S-012960 | Oct 63 | USA | Denmark |
| MOSKALEV, Yuriy Ivanovich | 23/7/20 | Scie | S-012960 | Oct 63 | USSR | USA |
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| MOSKALEV, Yuriy | 1920 | | S-022766 | 14/11/64 | USSR . | Aust. |

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| MOSKALEV, | Yuriy | 1920 | 1000 000 | S-022766 | 10/5/65 | Czech Aust |
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| MOSKALEV, | Yuriy Ivanovi | ch 23/7/20 | Chem. | T-286915 | 4/4/68 | - UK |
| MOSKAEEE, | Yuriy Ivanovi | ch 23/7/20 | Chem. | T-286915 | 11/4/68 | UK - |
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| MOSKALEV, | Yuriy | Ivanovich | | | | | |
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USSR CONFIDENTIAL CIA-P-312403
MOSKALEV, YURIY IVANOVICH. 1971.
INSTITUTE OF BIOPHYSICS, ...

("12"5 1-16"1")

April 1977

MEMORANDUM FOR THE RECORD

SUBJECT: Possible Identity of the "Unidentified Man"

Photographed in Mexico City in October 1963

REFERENCES: A. Photos Taken in Mexico City by Mexico City

Station

- B. Paperback Book "Appointment in Dallas"
- C. Soft File, Headquarters Information on Yuriy Ivanovich MOSKALEV, Possible "Unidentified Man"
- 1. Photographs of the unidentified man were taken by our Mexico City Station on 2,3,4, and 15 October 1963, going into or coming out of both the Cuban and Soviet Embassies in Mexico City. Copies were provided to the FBI in Dallas. Texas on 22 November 1963. Although cropped copies have appeared in various works, including Volume XX, page 691, of the Warren Commission Report, and the book "Appointment in Dallas", to our knowledge the individual has never been identified.
- 2. On 17 March 1977, a former member of the Cuban General Directorate of Intelligence (DGI) recognized photographs of the unidentifid man as Yuri LNU, a KGB officer, whom he met in Moscow in 1964 while attending an intelligence course there. He said that Yuri, a fluent English and Spanish speaker, was acting as a trouble shooter for the Curan group, about 15, attending the course. Yuri lived with

the Cuban and Bulgarian groups quartered in the same building in Moscow. Any time the Cubans had a problem, Yuri would solve it for them. Yuri was a good friend of Juan (pseudo) a KGB officer who taught the Cubans about the Agency (CIA) and the West German intelligence apparatus. Juan told the DGI member that he had served in Mexico for about 20 years and in the U.S. clandestinely for about 10 years (specific dates unknown). Yuri was entrusted with their welfare only, and did not attend classes with the Cuban group.

SE/X travel records were reviewed in search of an individual by the name of Yuri who possibly fit the description of the unidentified man. This lead to an individual by the name of Yuriy Ivanovich MOSKALEV, a Soviet, reportedly a Doctor of Medical Sciences, who has participated in international scientific conferences for the USSR since 1962 or earlier. Although there is no official 201 file on MOSKALEV, there is a sizable dossier on him in the Central Reference Service. Many of the documents in his dossier are 00 reports from U.S. scientists concerning MOSKALEV's attendance and behavior at scientific meetings. It is obvious that he has a much greater knowledge of the English language than he admits. His capability is said to improve greatly after a few drinks; however, it is noted that he rarely, if ever, drank at the scientific meetings. It is also noted that on occasions he reportedly was not qualified to represent the Soviets at a particular conference. His papers rarely, if ever, were specific, or presented new data.

Following are items of interest from selected documents in MOSKALEV's CRS dossier:

- a. In 1961 PENKOVSKY identified a photo (with no name provided) as that of Col. Yuriy Ivanovich MOSKALEVSKIY, Air Force Col. and GRU officer in the Information Directorate of the GRU.
 - b. In December 1963 the FBI reported



- c. In October 1963 MOSKALEV was a delegate to the IAEA Symposium on Neutron Irradiation, Brookhaven, Long Island, New York. Described by U.S. scientists as very sharp, MOSKALEV was a frequent commentator on other people's work and made a practice of denigrating their reports with respect to radiation lethality.
- d. In October 1967 MOSKALEV participated in the Second International Symposium on Delayed Effects of Bone Seeking Radio Nuclides, Sun Valley, Idaho, arriving two days early. He

travelled ai o Sun Valley and appare was able to use MI SIZ his knowledge of the English language to get along on his own. Although he complained about not browing much English, he admitted writing the English version of the paper he presented. MOSKALEV attempted to make propaganda of a paper by a West German scientist. A respected U.S. scientist said he fran'ly did not believe MOSKALEV's findings. MOSKALEV took copious notes on all papers, which indicated he understood what was going on. He also took many pictures with a 35 mm camera. From questions MOSKALEV asked, it was obvious that he !new English quite well. Although considerable time was spent arranging for MOSKALEV to visit a U.S. laboratory en route to his home, he took a different route, without telling anyone of his plans, and did not visit the lab.

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- 4. On 23 March 1977 several identification experts of the Disguise and Identification Section of OTS/GAD compared photos of the unidentified man with photos of Mark Yuriy Ivanovich MOSKALEV from the FBI, Liaison, and CRS. It was their opinion that MOSKALEV could very likely be identifiable with the unidentified man.
- 5. Page 59 of the book "Appointment in Dallas," shows an Identi-Kit Model composite of an individual who told the author in London in 1972 that he was involved in the assassination of President Kennedy. The composite of that individual (code name "Saul"), whose real name is unknown to the author, hears a striking resemblance to the photos of Yuriy Ivanovich MOSKALEV. According to the author "Saul" identified the picture shown in the Warren Commission Exhibit #237 as having been taken at the Russian Embassy in Mexico City, either in the foyer or just outside.

- 6. The author of the aforementioned book, Hugh C. McDonald, is the inventor of the Identi-Kit and at one time was under contract to CIA in regard to the Identi-Kit. McDonald claims in his book that he met "Saul" at an office in CIA Headquarters sometime after the Bay of Pigs invasion, and that a colleague of McDonald told him that "Saul" was an assassin.
- 7. There are striking parallels between the backgrounds of "Saul" as given in McDonald's book, and MOSKALEV. For example:

"Sauf"

Pg. 7 - CIA allegedly knew
of Saul. McDonald said he first
met Saul in CIA Hqs. CIA took
picture of Saul that started
McDonald's investigation.

<u>Pg. 59</u> - See Identi-Kit composite of "Saul".

Pg. 60/61 - McDonald states it
was obvious that FBI and CIA
were compromised at the very
top since both Agencies denied
knowledge of "Saul". No one wanted

MOSKALEV

According to Office of Security,

McDonald has been in touch with

CIA in relation to his Identi-Kit.

His states he was a

cleared source of LAFO/DCS - doi

September 1969. (contract agent)

It is true that Mexico City Station
took photos of "Saul" that McDonald
claimed started his investigation.

CDH comment: See photos of
Yuriy Ivanovich MOSKALEV. He
bears striking resemblance to
"Saul."

Helms, the DDP testified under oath that he didn't know "Saul."

to hear anymore about him.

of "Saul" in 1970. It began, he said, with a call from an unidentified woman who arranged a meeting in London and told him she believed the Russians had a germ warfare installation in Vozrozdenya, in the Aral Sea. McDonald obtained CIA approval to make contact.

Pg. 70 - In Germany in 1945

McDonald knew of 12 people

(Poles, Czechs, Rumanians,

Germans, Scandinavians, 2 Russians)

who feared and hated Russia. They

formed org. to observe, analyze,

and report all future activities

within Russia and Russia sphere

of control. Most had legitimate

jobs.

Pg. 71 - 24 Sept 70 McDonald left for London with "Saul's" picture. McDonald said both he and Saul were contract men for CIA. Saul did dangerous jobs for private interests.

Pg. 73 - McDonald learned that on Island of Vozrozdenya, Aral Sea, germ warfare was being planned against U.S. (Russians transmit germs in iet streams).

Note MCSKALEV's scientific background and travel.

He was in the U.K. in 68,70,71 and 72. Background is biophysics. MOSKALEV's (GRU) contact BUBNOV/"specialized in chemical warfare".

MOSKALEV was allegedly imprisoned during war because of his German descent or for black market dealings. Could he be a double agent?

McDonald met Saul in London

July 72. MOSKALEV travel shows

him in London Nov 72.

McDonald showed photo of Saul to man. Man asked if McDonald's interest had to do with murder of Pres. in 1963. McDonald said no, he wanted to talk to him (Saul) on business By now McDonald was sure that "Saul" was reasonably well-known in highly specialized circules on the European continent/circles as scientist. MoDonald says that co-relation between activity on Vozrozdenya and new types of

14-00000

Man told McDonald in summer of 1970 on outskirts of Gormisch, that he was dying from radiation sickness. He was flown to Vozrozdenya where he was lead to believe there was hospital that specialized in cases of radiation sickness and he would be looked after by famous doctors. Was interviewed by 3 Russian specialists: Emile KROPTATE Peter GORSACH

Marion LENTZEN

influenza in U.S. is disturbingly

exact.

MOSKALEV is known in international

MOSKALEV was delegate to 2nd International Congress on Radiation Protection, Brighton, U.K. 3-8 May 70.

Pg. 95 - At hospital was orderly by name of Ivan. There were other young interns, orderlies, etc., there.

Pg. 99 - Some momths before

Kennedy was killed, an inquiry
was being circulated, about
this man (Saul). Someone wanted
to contact him. Word went out that
someone needed his services.

Pg. 109 - An alleged former
(McDonald called Kimsey)
Agency employee/said the
scheme which "Saul" described

To kill the president/
could not possibly have been
activated without help from
very high places in this country.
(U.S.)

Pg. 117 - Saul did not know he was being called Saul.

Pg. 119 - Saul told Kimsey that he often used limp as part of his disguises.

Pg. 120 - In Zurick in 1972

McDonald saw four men. Three

Arabic and one who had a blunt,

Slavic fact with a broad-typed

nose, about 40.

MOSKALEV's middle name is

Ivanovich; so is BJBNOV's.

Could this have been MOSKALEV?

Pg. 121 - Kimsey felt that Saul was a middle-European, so probably grew up with German as second language. "Saul spoke English like an American.

MOSKALEV has much greater knowledge of English than he pretends or admits.

Pg. 143 - "Saul" said he came back to the U.S. for a short period one time, lived in Southern Calif. for about a month, or six weeks, then moved to Mexico. Said business was good in Mexico, and that made it easy, or easier, to try to make contact with whoever was trying to make contact with him.

Pg. 164 - Saul said a contact he knew/ According to our records, namedTroit would have OSWALD in Mexico City 26 Sept to 3 Oct. and that OSWALD would call on both the Cuban Consul and Soviet Consud.

"Saul" said he did not have a photo of OSWALD but had a contact in the Soviet Embassy would do the job (identify OSWALD) for him. Saul said OSWALD did show up in Mexico City and was fingered to He sat close to him in him. restauratns and cafeterias.

OSWALD was in Mexico City between those dates, and was in contact with the Cuban and Soviet Consuls.

Page 167: "Saul" said he left for the U.S. in Nov 1963 but would not say how ow where he crossed the border. On evening of the 20th of Nov he was in Dallas.

Page 177: "Saul" described how ...
he shot President Kennedy from
2nd story window of County
Records Bldg.,

Page 178: "Saul" said that he used "limp" disguise" out of bldg., and in 2 hours was out of the U.S.

Page 182: McDonald remembers
"Saul's" statement that long
before the Warren Commission even
existed he had been told that
there was a possibility that
such a bullet would be planted
to tie in OSWALD's rifle positively
to the shooting.

It therefore appears that the mere existence of CE No. 399 tends to prove the accuracy of "Saul"s statement and the presence of a contract of the contract of

McDonald said that as a professional assassin with international clientel, "Saul" had to master the art of crossing borders illegally, so that no record is kept. False passports are easiest methods.

Could "Saul" be mystermy man who boarded plane for Havana? See DIRECTOR 36054. Flight from Mexico City reportedly delayed from 1700 to 2200 hours for passenger who arrived at 2130.

conspiracy.

- 12 -

Page 185: McDonald .. he believes

"Saul" was telling true story.

Page 94: McDonald finds buck

passing so pervasive that he

cannot escape suspicion of a continued

and officially backed cover-up.

Page 199: McDonald said he thinks
Herman KIMSEY (what was true name?)
was the mentor or contact for "Saul"
wherever Saul worked with the
Agency.

"Saul" moves from Page 203: country to country, avoiding the U.S. except in extremis but keeping in touch with his contacts in Guatemala and Mexico. calls THEM. Spends much time in Has no wife, children, or Europe. Is voracious reader. friends. "Saul" went into Page 204: Westbury Hotel without a tie. Page 205: "Saul" had recently given up smoking (1972?) but still had nicotine stains on fingers. CDH - I do too.

Can we identify KIMSEY? Was he really working for Agency?

Does MOSKALEV smoke?

Chris Hopkins LAD/JFK Task Force 27 September 63: OSWALD went to Cuban Embassy, Mexico City and made appoint for visa to Cuba on way to USSR. OSWALD to Soviet Embassy to get letter of recommendation. They wouldn't give it to him because they didn't know who he was.

OSWALD went to Soviet Embassy on 27 Sept.

"then went back to Cuban Emb. on 27 Sept. Valery KOSTIKOV talked with Sylvia Duran and said Soviet had never heard of OSWALD.

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SUBJECT: Unidentified Man Seen Going into Cuban and Soviet
Embassies in Mexico City in Oct 1963.

Photos Taken by Mexico City Station





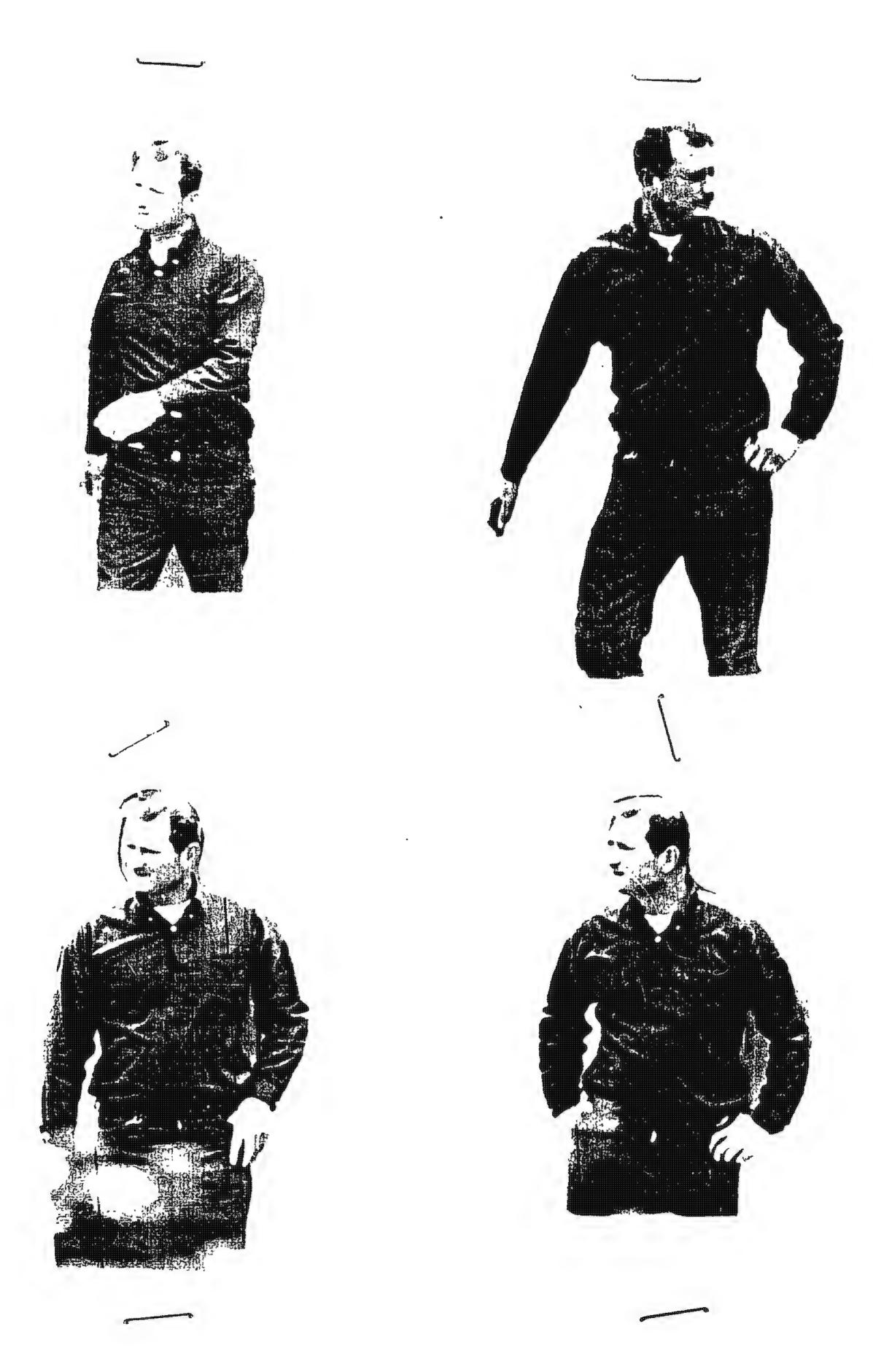


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Subject: Unidentified Man

1. A photograph of this unidentified man was published in the Warren Commission report on the assassination of President Kennedy. Copies have also been widely distributed in news media by journalists critical of the Warren Commission investigation. The subject visited the Cuban and Soviet Embassies in Mexico City during October 1963.

- 2. As of October 1963, he was described as:
- Apparent age: 35
 Athletic build
 - About 6 feet tall
 Blond, receding hairline with balding top
 Wore khakis and sport shirt.

| UBJECT: (Optional) | | | ٠ | |
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| P. 40. 4. 3 | | Case 5 | | |
| PCD/OSG/Alien Branch | | | EXTENSION | NO. |
| | | e ≈ open page and pa | | DATE |
| 203 Key Building | | | 2775 | 6 Apr 1977 |
| O: (Officer designation, room number, and building) | D. | ATE | OFFICER'S | COMMENTS (Number each comment to show from whom |
| | RECEIVED | FORWARDED | IMITAL | to whom. Draw a line across column after each comment.) |
| 1. LA/COG/NY Attn: 3D 5325 | | | | REF: LA/COG-068-77, dated 3 Mar 77 |
| 2. | | | | Attached copy of memo SF-137-77, dated 29 March is in response to |
| 3. | | | | reference. Attached also are related photographs. |
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UNITED STATES GOVERNMENT

Memorandum

SF-137-77

TO : Chief, Domestic Collection Division

DATE: 29 March 1977

ATTN:

OSG/Alien

FROM

Chief

SUBJECT:

Case 53,034 - Resettlement Case

REF

: ALN-71-77

- 1. Subject examined the photographs of the unidentified man very carefully but was unable to provide any information. We did not mention the fact that a photograph of the man had been published in the Warren Commission report until Subject said that he was unable to identify the man. Subject still could not make any comment about the identity of the man.
- 2. We are returning the photographs of the man as requested. We regret that Subject was unable to be of greater assistance on this matter.

Enc: Photographs

E 2 IMPDET CL BY 031686

| SULECT: (Optional) | | | | | | |
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SECRET

AB MEMO NO. 194 29 MARCH 1977

| MEMORANDUM FO | OR: I | Deputy | Chief. | Latin | America | Division |
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ATTN :

FROM : Graphics and Authentication Division/Senior Operations Officer

SUBJECT : Photo Comparison

REFERENCE: DDO/LA Division Memo, dated 25 March 1977

1. On 23 March of Latin America Division handcarried photographs to OTS/GAD for identification comparison. These photos were examined by the undersigned and two identification experts of the Disguise and Identification Section.

2. The results of the comparison is as follows:

- A. Facial Shape Close similarities, although there are slight differences which are probably due to subject's age differences.
- B. Chin Fair similarities-the loss of muscletone due to ageing is most apparent here.
- C. Hair Line Again good similarity with the natural ravages of time factored in.
- D. Set and Proportion of Eyes and Eyebrows Close similarities. (Comparison of eye detail is not possible due to poor photo quality)
- E. Nose and Caliper Lines Close similarities in the nose but the younger man has no sign of the distinctive caliper lines which extend from the nose to either side of the mouth on the known Soviet. This could be explained by loss of muscletone and/or differences in lighting.
- F. Mouth The shape, proportion and expression of the mouth and the whole area from the tip of the nose to the tip of the chin is perhaps the most distinctive characteristic of both subjects. Here the similarities are very close.





SUBJECT: Photo Comaprison

PAGE -2-

G. The proportions of the head, check bones and the body style of the younger man tend to indicate he is of slavic origin.

3. The results of this type comparison are rarely absolute and are usually limited by poor photo quality or differences in viewing angle. With that understood it is our opinion the two subjects of the forementioned photo comparison could very likely be the same person. If additional photographs of the subjects, particularly if they are of better quality, are obtained, we would be happy to examine those as well.

Antonio J. Mendez

Senior Operations Officer,

OTS/Graphics and Authentication Division

| TO: | | LAD/Task | Force |
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FORM NO .241

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REPLACES FORM 36-8 WHICH MAY BE USED.

(47)

: 5 MAR 3/

MEMORANDUM FOR: Chief, OTS/GAB

ATTENTION : Acting Chief, OTS/GAB/DIS

FROM : George V. Lauder

Deputy Chief, Latin America Division

SUBJECT : Photo Comparison

This is the official follow-up, requested by you, of the visit to your office on 23 March 1977 for the purpose of photo comparison. Although a preliminary analysis was given at that time, it was understood that you would provide a written analysis for the record. Your assistance is much appreciated.

/s/ weorge V. Laude:

George V. Lauder

DDO/LAD Task Force (25 Mar 77) 1839

Based on: Photos of unknown man taken in front of Soviet and Cuban Embassies in Mexico City in October 1963;
Photos of Yuriy Ivanovich MOSKALEV.

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ALN-72-77 11 March 1977

| MENORANDUM F | OR: Chief |
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| FROM | : Chief, Domestic Collection Division, Operations Services Group, Alien Branch |
| SUBJECT | : Case 57845 |
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103 DCD/HEADQUARTERS.

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01R-06870-77

SUBJECT: UNIDENTIFIED KGB OFFICER

REF 8 DCD CASE 57845 CFLA-006877

1. ON 17 MARCH 1977, A FORMER MEMBER OF THE CUBAN GENERAL DIRECTORATE OF INTELLIGENCE (DGI) WAS REQUESTED TO IDENTIFY AND PROVIDE INFORMATION ON AN UNIDENTIFIED MAN. THE FORMER DGI MEMBER IDENTIFIED THE MAN AS YURI (LNU). A KGB OFFICER, WHOM HE MET IN MOSCOW IN 1964 WHILE ATTENDING AN INTELLIGENCE COURSE IN THAT CITY, HE SAID THAT YURI. A FLUENT ENGLISH AND SPANISH SPEAKER. WAS ACTING AS A TROUBLESHOOTER FOR THE CUBAN GROUP, ABOUT 15, ATTENDING THE COURSE.

2. THE FORMER DGI MEMBER SAID THAT THE CUBAN GROUP, ALONG WITH THE BULGARIANS, WERE QUARTERED IN THE SAME BUILDING IN MOSCOW AND THAT YURI LIVED WITH THEM. ANYTIME THAT THE CUBANS HAD A PROBLEM YURI WOULD SOLVE IT FOR THEM. HE ALSO SAID THAT YURI WAS A GOOD FRIEND OF JUAN (PSEUDO), A KGB OFFICER WHO TAUGHT THE CUBANS ABOUT THE AGENCY AND THE WEST GERMAN INTELLIGENCE APPARATUS. JUAN TOLD, THE FORMER DGI MEMBER ONE DAY THAT HE HAD SERVED IN MEXICO FOR ABOUT 20 YEARS AND IN THE US CLANDESTINELY FOR ABOUT 10 YEARS. AT THE TIME JUAN WAS ABOUT 55 YEARS OLD. YURI DID NOTATIEND CLASSES WITH THE CUBAN GROUP. HE WAS ONLY ENTRUSTED WITH THEIR WELFARE. E2 IMPDET CL BY 011668

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AU - NIFBEOV AP

AU - Erokhin RA

AU - Buldakov LA

AU - Lember9 VK

AU - Koshurnikova NA

AU - Filippoya LG

AU - Ternovskii IA

TI - Metabolism and biological effects in rodents of Plutonium and other actinide elements. PP. 1214-32.

SO - In: Nygaard OF, et al., ed. Radiation research: biomedical, chemical, and Physical Perspectives. New York, Academic Fress, 1975. W3 IN558 197r. :

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SPECIALIZATION:

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INTERNAL ARDICINE

CAREER POSITIOES:

INST OF CARDIOLOGY IN & L HYASBIROV, ARS USSR, H

PUBLICATIONS, ARTICLES:

"CHARGES OF THE TOTAL AND RENAL HEMODYNAMICS IN ORTHOSTATICS IN HEALTHY PERSONS AND IN ORTHOSTATIC

RYPOTESSION (CO-10) "COMPRESATORY CHANGES IN THE RIDNEYS IN UNILATERAL APPECTIONS AND NEPHRECTORY" (CO-AU)

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THE DIDRETIC AND RIPOTENSIVE SFFECT OF DREGIT (ETHAIRINIC ACID) " (CO-AU)

SPECIALIZATION:

CARDIOVASCULAR SURGERY

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CABEER POSITIONS:

DIV OF VASCULAR SURGERY, IEST OF CARDIOVASCULAR SURGERY IS A W BARULEY, ARS USSR, A

PUBLICATIONS, ARTICLES:

"THE CLIBICAL PICTURE, DIAGNOSIS AND SURGICAL TREATHERT OF CONGENITAL ARTERIO72HOUS FISTULAS OF PRRIPHERAL VESSELS" (CO-AU)

"BEHODYBARICS WITH ABTERIOVEBOUS FISTULAS (ON DATA OF CARDIOGRAPHY AND SCANNING OF THE BEART

BARE:

HARE:

HOSKALEBRO, YUBIT YRYGEB TEVICE

SPECIALIZATION:

Pers lology

CARBER POSITIONS:

HEAD, LAB OF REGULATION OF BLOOD CIRCULATION IN THE BRAIN, INST OF EVOLUTIONARY PRYSIOLOGY AND

BIOCHERISTRY IN I A SECREBOY, AS USSR, A

PUBLICATIONS, BOOKS:

INTRACRASIAL BLOOD CIRCULATION UNDER THE CONDITIONS OF STRESS AND WEIGHTLESSNESS, 4, 1971 (CO-AU) DYNAMICS OF BLOOD FILLING OF THE BRAIN UNDER NORMAL CONDITIONS AND DURING GRAVITATIONAL LOADS,

L. 1967

BOSKALEY, YURIY IVABOVICE

SPECIALIZATION:

BOERTGEBOLOGY AND REDICAL RADIOLOGY

CAREER POSITIONS:

IBST OF BIOPHYSICS, &

PUBLICATIONS, ARTICLES:

"CHARGES IS LESS OF BATS AFTER TOTAL EXTERNAL BETA-IRRADIATION" (CO-AU) THE COMPARATIVE EPPECTIVENESS OF EUROPIUS-152 AND CORIUS-244" (CO-AU) THE DISTRIBUTION AND BIOLOGICAL EFFECT OF CALIFORNIUS-252" (CO-AU)

THE EFFECT OF SUB-ACUTE 241AB DOSES OF RABBITS" (CO-AU)

*EXPERIMENTAL INVESTIGATIONS ON RADIOBIOLOGY IN THE USA.

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SPECIALIZATION:

OBCOLOGY: ROESTGESOLOGY AND MEDICAL RADIOLOGY

THE BADIOBIOLOGICAL EXPERIEER AND MAR, B. 1969

CAREBE POSITIONS:

POBLICATIONS, BOOKS:

BESEARCE IEST OF ORCOLOGY IS B B PETROF, L

PUBLICATIONS, ARTICLES:

"EPPECT OF BREEGY MAGRITUDE OF ISPULSE AND SHITTER OF IRRADIATION ON THE ARTITUMOR SPIECT OF LASER RADIATION (CO-AU)

PROBLEMS OF THE DISTRIBUTION AND EXPERIEENTAL EVALUATION OF PERMISSIBLE LEVELS, 6, 1968 (CO-AO)

"OTESTIONS OF THE USE OF LATERS IN ORCOLOGY" (CO-AU)

BABE:

BOSEOVICE & G

INTERNAL MEDICINE

SPECIALIZATION:

CLIBICAL HOSPITAL IR S P BOTKIB, H

CARBER POSITIOUS: PUBLICATIONS, ARTICLES:

"DEVELOPMENT OF A GRAVE FORM OF DIABETES BELLITUS AND OF STPERGLYCEBIA IN TWO PATIENTS AFTER

TABLEG REPOTHIAZIDS* (CO-AU) THO CASES OF STPEROSHOLLARY COMA DURING DIABETUS SELLITUS" (CO-AU)

PUBLICATIONS, BOOKS:

DIABETES RELLITUS AND DISEASES OF THE EYES, 8, 1966 (CO-AU)

BRBE:

美国教育

BOSKOVKIBA O TA

SPECIALIZATION: CAREER POSITIONS: ORCOLOGY: VIBOLOGY EXPERIENCE TOROR TRERAPY LAB, RESEARCH INST OF OMCOLOGY IN P A GERTSEN, 8

POBLICATIONS, ANTICIES:

"THE EPPPET OF A COMBINED THERAL OF FIRAL LEGKENIA OF HICE WITH CICLOPHOSPHANE AND COMPLETE PREUED ADJUVANTO (CO-AU) "STIBULATION OF CC57BR-BY VIRAL BETICULOSARCONATOSIS BY COMPLETE PREDIO'S ADJUVANT IN BICE" (CO-AU) #STIRGLATION OF RAUSCHEE-FIRUS-INDUCED LEUKBROGENESIS BY COMPLETE FREUND'S ADJUTANTE (CO-AU)

EDUCATIOE:

DR 880 SCI (1967)

SPECIALIZATIOE:

PEDIATRICS: ORTHOPEDICS AND TRAGNATOLOGY

CIREPT (): TITLE

BAAD, CHAIR OF PEDIATRIC SUFLERY AND ORTHOPEDICS, STATE HEDICAL INST. TORSE, RSPSR

INTELLIGENCE

Intelligence Informat. 1 Report

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission Durace or revelation of which in any manner to an unauthorized person is prohibited by law.

C-O-N-F-I-D-E-N-T-I-A-L

COUNTRY

USSR

E-324/37776-71

SUBJECT

Visit to US by Yu I Moskalev and Alex Moiseev/Current Positions/Moskalev's Research Program/Personality Data DATE DISTR. 23 DEC. /I

NO. PAGES 2

REFERENCES

REPORT NO.

DATE OF INFO. October 1971

THIS IS UNEVALUATED INFORMATION

- 1. In October 1971 Dr Yu I Moskalev, Institute of Biophysics, Ministry of Public Health, Moscow and Dr Alex Moiseev. Central Advance. Institute for Training of Physicians, Moscow, visited several US biological and biophysical research facilities. During one of these visits it was learned from Moskalev that he is the Chairman of the USSR equivalent to the US National Council on Radiation Protection. In this position, Moiseev is Moskalev's secretary.
- 2. Hoiseev was a difficult individual to figure out. He stated that his training is in health physics and that his job in the USSk is to be informed at all times of the status of US health physics and radiation protection programs. He said that he reads the US journal "Health Physics" regularly as well as other Western radiation research journals. Although in discussions with Moiseev he appeared to be technically competent, he kept very close to Moskalev and rarely let him out of his sight. If Moiseev is Moskalev's "guardiam" (as he appeared to be) he let his own guard down during a cocktail party hosted by Dr David M Taylor, Department of Biophysics, Institute of Caucer Research, Belmont, UK. During the course of the evening Moiseev consumed countless gin and tonics until he could barely articulate. Moskalev, on the other hand, sipped one or two drinks all evening.
- 3. Moskalev was a very adept diplomat. He finds it easy and convenient to adopt his conversation to whatever kind of group he is with. He talked at considerable length about the role of women in the Soviet economy and mentioned that his own wife is a pathologist. He was always much freer in his conversation when Moiseev was out of hearing.
- 4. In terms of his professional work, Moskalev stated that he has a program in the USSR of exposing dogs to various doses of radiation to learn the biomedical effects of radiation. It is a program quite similar to that at the Lovelace Foundation in Albuquerque, New Mexico. The major difference being that whereas the Lovelace inhilation experiments involve only the beagle dog, the Soviets do not use a controlled breed, but rather use mongrels. Moskalev's budget, which

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The dissemination of this document is limited to civilian employees and active duty military personnel within the intelligence components of the USIB member agencies, and to those senior officials of the member agencies who must act upon the information. However, unless specifically controlled in accordance with paragraph 8 of DCID 1/7, it may be released to those components of the departments and agencies of the U. S. Government directly participating in the production of National Intelligence. IT SHALL NOT BE DISSEMINATED TO CONTRACTORS. It shall not be disseminated to inizations or personnel, including consultants, under a contractual relationship to the U. S. Government without the written permission of the originator.

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he implied was sufficient, comes from the Soviet Ministry of Health. The actual Soviet work with the dogs is virtually parallel that in the US. It involves studying the low level effects of radiation from inhaled or injected materials.

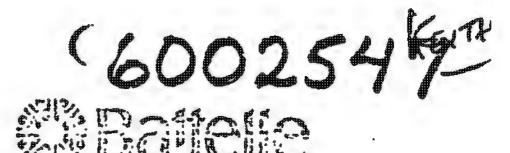
5. Moskalev's work appears to be very good as far as it has gone. But he has only worked with nitrates and chlorides of plutonium, not with plutonium oxide. Oxides (solid components) should be of interest to anyone working in this field because the chemical forms of plutonium are quite useful to know about when doing accident type studies — to understand plutonium metals it is essential to know about plutonium oxide. Whether the Soviets are working only with solutions rather than oxides is not known. It is always possible, of course, that Soviet work with plutonium oxides is classified.

- end -

C-O-N-P-I-D-E-N-T-I-A-L

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Pacific Northwest Laboratories Battelle Boulevard Richland, Washington 99352 Telephone (509) 946-2121 or 942-1111 Telex 36921

October 25, 1971

Mr. D. G. Williams
Manager
United States Atomic Energy Commission
Richland, Washington 99352

Dear Mr. Williams:

Report on Visit of USSR Citizens to Pacific Northwest Laboratories

Visitors

Professor Yuriy I. Moskalev, Institute of Biophysics, Ministry of Public Health, Zhivopisnaya 46, Moscow D-182, USSR.

Professor Aleksey A. Moiseev, Central Institute for Advanced Medical Studies, 2 Botkinsky proezd 7, Moscow A-284, USSR.

Date

Visitors arrived in Richland at 12:35 p.m., September 27, 1971 and departed early on October 2, 1971. They stayed at the Rivershore Motor Inn.

Schedule of Visit

September 27, 1971 - 2:30 p.m. Attended Dedication coremonies for new Life Sciences Laboratory in 300 Area.

6:30 p.m. Symposium banquet at Rivershore Motor Inn.

September 28, 29, 1971 - Attended Biology Symposium on The Biological Implications of the Transuranium Elements at the Rivershore Motor Inn. The symposium was sponsored by the AEC Division of Biology and Medicine and Battelle-Northwest.

September 30, 1971 - Attended meeting on Transplutonium Registry organized by the AEC Division of Biology and Medicine and Hanford Environmental Health Foundation.

October 1, 1971 - Visited Biology Department staff in Life Sciences Laboratory, 331 Building, 300 Area.

October 25, 1971

Participation in Symposium and Transuranium Registry Meeting

Five contributed papers and one invited paper by USSR scientists were included on the symposium program and were presented by Drs. Moskalev and Moiseev. These included:

- 1. Yu. I. Moskalov. Plutonium-239: Problems of Its Biological Effect (Invited).
- 2. L. A. Buldakov, Z. I. Kalmykova, A. P. Nifatov, V. N. Doshchenko, I. A. Tseveleva, G. S. Mushkacheva, N. P. Kudasheva, V. M. Pesternikov, V. I. Matveev, A. G. Surina, and V. N. Karpova.

 Metabolism and Biological Effects of Inhaled 241Am and 239Pu in Dogs.
- 3. N. A. Koshurnikova, V. P. Aristov, V. K. Lemberg, G. S. Mushkacheva, M. G. Poplyko, and I. A. Tseveleva. As to Mechanism of Development of Plutonium Pneumosclerosis.
- 4. T. I. Levdik, V. K. Lemberg, L. A. Buldakov, E. R. Lyubchanskii, and V. M. Pesternikov. As to Biological Effectiveness of Neptunium-237.
- 5. A. P. Mifatow, T. A Buldakov. and v. i. Matveev. Some water Effects After a Single Inhalation of 230Pu and 241Am in Dogs.
- 6. E. P. Ovcharenko. An Experimental Evaluation of the Effects of Transuranic Elements on Reproductive Ability.

The two visitors presented the Soviet papers in English (Dr. Moiseev speaks English quite well) and participated in the discussions of other papers. The visitors were already acquainted with many attending the Symposium so informal discussions were very common and apparently productive. Representatives from all major U. S. laboratories working on the transuranium elements and from the Atomic Energy Commission were able to meet with the Soviet visitors. The visitors related current status of their studies on biological effects of plutonium in their formal presentations and in their discussions. Their manuscripts have been received and will be published in the Symposium proceedings. During the week, they met with Dr. R. C. Thompson, Symposium Co-chairman to discuss editing of their manuscripts.

Visit to Life Sciences Laboratory

On October 1, Drs. Moskalev and Moiseev were escorted to the 331 Building by W. J. Bair. Discussions with the staff occurred during the day in the conference room with visits to various laboratory facilities occurring as necessary.

- Dr. J. F. Park Past, present, and future experiments on the biological effects of inhaled plutonium in laboratory animals; therapeutic removal of inhaled plutonium, and USSR recommendations to the ICRP to lower plutonium MPC's were discussed. These Soviet scientists have completed more work on the biological effects of inhaled plutonium in animals than any other research group except our own laboratory. The interchange of experimental methods, results, and concepts was valuable for planning our future research and evaluating the results of past and present research. Since they have reported biological effects of inhaled plutonium in experimental animals at extremely low exposure levels and recommended to the ICRP that limits of exposure should be lowered, the opportunity to understand and evaluate their experimental results, interpretation, and logic in making their recommendations was very useful.
- Dr. V. H. Smith Drs. Moiseev and Moskalev were reasonably well acquainted with the field of therapy for plutonium poisoning but not intimately in terms of details or recent Soviet literature; the former because his field was more on the ecological side, and the latter because he has concentrated on radiation effects and ceased active work on removal about ten years ago. Dr. Moskalev was interested in our plans to test phosphorothioic acids as removal agents and mentioned his own work on the removal of 144Ce with DTPA as an example of the timing of treatment. He stated DTPA was given i.v. to humans in the USSR, not by inhalation, and that Zn-DiPA was not used or being experimented with. The latter is difficult to believe due to his former close relationship with Dr. Catsch. He was not satisfied with the lack of side effects of multiple DTPA treatments and said that some problems with bone in long-term experiments could be due to DTPA but he wasn't aware of the details. Answers to questions about other treatments than DTPA, experience in treating humans, or future plans were not obtained because presumably this was not a primary research concern of Dr. Moskalev, although he did state there was considerable research effort in this field.
- Dr. C. L. Sanders discussed our low-level inhaled ²³⁸PuO₂ studies (life-span), metabolism of plutonium and cellular interaction with PuO₂ particles. The Russians were particularly informative in describing their low-level life span studies with ²³⁹Pu. It was learned that Dr. Moiseev is primarily a radioecologist who worked in Siberia and is familiar with oil pipe lines and associated ecological problems such as arctic and lake pollution problems.
- Dr. J. E. Ballou discussed their studies with soluble plutonium compounds, comparative metabolism and effects of DTPA, and our americium, plutonium, and cerium work. Dr. Moskalev had tried inhaled EDTA therapy many years ago to no avail. He was interested in our work with age effects on gut absorption and wanted to know why the very young absorb more plutonium. He agreed there is prolonged gut transit time and different intestinal morphology in

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- 25. 2311um, D. D. and M. R. Sikov. 1969. Physicochemical State as a Determinant of Plutonium-238 Toxicity in the Rat. Health Physics 17, 346-347.
- 15. Mahlum, D. D. and M. R. Sikov. 1968. Effect of Environmental remperature and Potassium Consumption on Cesium-137 Metabolism in the Rat. Health Physics 15, 541-543.
- 20. Mahlum, D. D. and M. R. Sikov. 1968. Distribution of Cerium-144 in the Fetal and Newborn Rat. Health Physics 14, 127-129.
- 21. Mahlum, D. D. 1971. Modification of the Hepatotoxic Action of Neptunium-237 in the Rat. Toxicology and Applied Pharmacology 18, 696-702.

Other Activities

During the week, in addition to participating in the Symposium social functions, they were guests in the homes of Dr. W. B. Lotz, Director, Hamith and Cafety Division, U. S. Atomic Energy Commission, Richland, Drs. W. J. Bair and C. L. Sanders. These occasions were enjoyable for the hosts and, apparently, for the visitors. Dr. Moskalev is an excellent chess player and very patiently played chess with both adults and children. Dr. Moiseev was interested in current fashions and consumer products. Mrs. Bair gave him the current Sears and Roebuck Christmas catalog as an example of consumer products. He was familiar with the mail order concept but we could not determine for certain that it is common in the USSR. Both Drs. Moskalev and Moiseev have dachas near Moscow which indicate they are well up the status ladder in USSR science, but it was also obvious that Dr. Moskalev's dacha is a level above Dr. Moiseev's.

The visitors also expressed interest in our standard of living. The visits to our homes seemed to dispel some doubts they might have had about our standard of living. They seemed particularly to enjoy the opportunity to meet our children.

Comment

All those having an opportunity to meet with our Soviet guests were impressed by their congeniality, willingness to discuss their research, interest in our family life, and the spirit of good will

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REPORT ON VISIT OF FOREIGN SCIENTISTS, OCTOBER 4, 1971

There were four guests in the group:

Dr. (Prof) Yuri I. Moskalev: Inst. of Biophysics, Ministry of Public Health, Moscow, 6001547

Dr. Alexei A. Moiseev; Central Inst. for Advanced Medical Studies, Moscow

Dr. Jean-Claude Nenot; CEA, Centre D'Etudes Nuclaires, Fontenay-aux-Roses, France.

Dr. R. Masse,; CEA as above.

The four visitors were not traveling together, but by coincidence were participants at the same Transuranium Biology Symposium at Hanford during the week of Sept. 26. They were in San Francisco by chance at the same time and desired to visit Berkeley on the same day.

Mrs. Anno Low-Beer picked up the four guests in San Francisco and brought them to the Donner Laboratory where they were greeted by Dr. John Lawrence. Drs. Donald Van Dyke, James MaRae, and Howard Parker took them on a short tour of the Anger camera facility and whole-body counting and scanning equipment. The current uses and potential in medical diagnosis were discussed. Major questions concerned the use of these instruments in monitoring and assessing the extent of persons contaminated with radionuclides in industrial accidents.

Lunch was attended by Dr. Hardin Jones, the four guests, Drs. Van Dyke and Parker, and Dr. Patricia Durbin, who acted as hostess and guide through the day. Topics discussed at lunch were centered about the Transuranium symposium. The efficacy of two new techniques to remove lung contamination by alpha-emitting isotopes was considered. The two techniques are lung lavage and aerosolized chealting agents, particularly DTPA.

A tour of Bldg. 74 followed lunch. Three of the visitors are biologists—Drs. Moskalev and Nénot are physicians, and Dr. Masse is a veterinarian—and all deal with animal experiments or the interpretation of the results of animal experiments. They were much interested in how one achieved and managed a "biologically clean" rodent colony, in the minimum maintenance rabbit rooms, and the cage—washing facilities. There was some discussion about the 90-Sr-injected monkeys, there exposure levels, years of follow-up, and the essential absence of biological effects at the dose levels in the study.

A two-hour general discussion between and among the four guests and Dr. Durbin followed the building tour. The chief topics discussed were how to explain the observed differences in the metabolism of the transuranic elements among species. The usefulness and verifiability of models of human Pu metabolism were considered at great length. New areas of research in internal emitters problems were considered including the influence of age on local dose and ultimate biological end-points; the usefulness of common experiments with various species particularly those with known variations in iron metabolism, bone formation rates and liver function.

Dr. Durbin proposed a collaborative effort with two of Dr. Moskalev's colleagues. They have collected data on human skeleton weights, but now do not have the time or interest to write up their material. Dr. Durbin has collected all of the 19th century and early 20th century human bone weight data and would like to add the modern Russian material to the set. Dr. Moskalev agreed to propose a joint article with his colleagues looking towards publication in an international journal. He suggested that the original data would be forwarded in any case as soon as it could be copied.

In the late afternoon the visitors toured (briefly) the Bevatron guided by Ralph Thomas; the californium separation facility guided by Francis McCarty; and the Hi-lac guided by Al Ghiorso. Dr. Moiseev, who is a physicist, was very much intrigued by the proposal to make an advanced scientific instrument by joining the Bevatron and the Hi-lac. Dr. Moskalev was not interested in how the machines worked, "physics was not his iteld he said but asked what he as a biclogist might do in the nature of radiobiology experiments with such machines.

Dr. Moskalev regretted that it had not been possible to visit with Dr. Tobias. (We could probably have fit in a few minutes or made arrangements for the following day, but I had run them ragged with sight-seeing the day before, Monday was very full, and frankly they were exhausted and needed rest. pwd). They would also have liked to visit the Medical Services group. Mrs. Low-Beer tried to fill them in on the duties and routine of that group.

Comments on money, budgets, problems of communication, demands on time such as committees, etc. ran through all of the conversations. Dr. Nenot and Dr. Moiseev spoke English and understood it well. Dr. Nokkalev and Dr. Masse understood more English than they could speak. All four are chiefly occupied with radiation protection and especially with problems raised by internal emitters. Dr. Moskalev is his country's representative on the ICRP internal dose committee. They all forsee the development of nuclear power in their countries at a fast pace. This obviously includes, as they were careful to point out, Pu fast breeders, hence the overriding interest in Pu and its transplutonium contaminants.

The Russian visitors will be guests of the AEC Division of Biclogy and Medicine in Washington. (I feel certain we will receive good marks as hosts and as scientists. pwd).

One further point needs to be added. Although nuclear medicine is not a cuurent specialty in either country, and the use of nuclear medical techniques, especially as diagnostic tools, is very limited, the two physicians indicated thay they personally were much interested, and there was a definite trend in both countries towards more and more use of such tools. "It is coming", they said.

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COUNTRY: USSR

SUBJECT: Dr. Y. I. Moskalev, Institute of Biophysics, Noscow/Professional Interests/Personal

Characteristics/Foreign Travel

13 Nov 70

1. In September 1970, Dr. Yuri Ivanovich Moskalev visited a US facility devoted to research in the field of nuclear medicine. Dr. Moskalev was born on 23 July 1920 in Igumnobo, USSR, which is near Kalinin. In 1922 his family moved to Leningrad. He has lived in Moscow since 1948. In 1958 he became the head of a division comprised of approximately 30 people at the Institute of Biophysics, Soviet Ministry of Public Health, Moscow. He is the best known investigator of the metabolism and toxicity of radioelements in the Soviet Union and has published a number of papers and reviews on this subject. During his visit, he outlined his as yet unpublished experiment on skin carcinogenesis in rats (dosage administered to the body surface by Sr⁹⁰ -Y⁹⁰ plaques on the sides of the cage) and reported two percent tumors of the skin and some mammary tumors after a 245 rad exposure. It is obvious that he is a careful and trustworthy worker.

- 2. Moskalev is conversant with English but not fluent and has some difficulty in finding the correct English words; however, with a little patience, scientific communication is very satisfactory. He is genial, frank, and possesses a good sense of humor. He prefers Leningrad to Moscow, considering the former to be a more traditional and cultured city. His chief recreational diversion is his dacha, near Moscow, to which he sometimes travels by skis in winter (a distance of approximately 20 kilometers).
- 3. Dr. Moskalev has visited the United States on two previous occasions; once attending the Sun Valley Symposium in 1967 and again for the Annual Hanford Biology Symposium in 1969. He has traveled to other places outside the Soviet Union and was present at a meeting sponsored by the IAPA in Vienna in 1964.

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Yuriy Ivanovich MOSKALEV

CENTRAL REFERENCE

SERVICE

CURRENT POSITION: Institute Biophysics, Moscow

since 1953.

BIRTHDATE AND

: 23 July 1920; Igumnovo, RSFSR.

BIRTHPLACE

EDUCATION : Doctor Medical Sciences.

PARTY MEMBERSHIP: Member CPSU since 1951.

CAREER

Member, Radiobiology Department, Nuclear Research Institute, Sungul 1951-53 (Head, Pathophysiology Laboratory 1953).

SCIENTIFIC SPECIALTIES Biological effect of fast neutrons and protons of high energy; blastomogenic effect of ionizing radiation; distribution of yttrium-91, zirconium-95, and niobium-95 in rats after inhalation; distribution of radium isotope thorium-X, antimony-124, tellurium-127, tin-113, cerium-144, and strontium-89, 90; distribution of lead (thorium B) after intra-arterial and intravenous injection; dynamics of white blood cell reaction to irradiation; kinetics of excretion of Nb95 from organism; blastomogenic effect of 120-Mev protons; primary blood relations induced by ionizing radiation; behavior of cesium-137 in mammals; distribution and biological effect of americium-241; (1963-68).

TRAVEL

International Conference on Diagnosis and Treatment of Radioactive Poisoning, Vienna, October 1962; International Atomic Energy Agency (IAEA) Panel on Toxicity of Incorporated Radionuclides, Vienna, June 1963; Symposium on Radiological Health and Safety in Nuclear Materials Mining and Milling, Vienna, August 1963; visit, Poland, June 1963; Symposium on Biological Effects of Neutron Irradiations, Brookhaven, New York, October 1963; visit, Austria, November 1964; visit, Czechoslovakia, May 1965; Third International Conference on Radiation Research, Cortina d'Ampezzo, Italy, June-July 1966;

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TRAVEL

Effects of Bone-Seeking Radionuclides, Sun Valley, Idaho, September 1967; visit, Salt Lake City, Utah, September 1967; visit, Montreal, September 1967; visit, UK, April 1968.

PERSONAL

About five feet, eight inches tall; graying, dark blond hair, with receding hairline; gregarious; reads, writes, and comprehends English well, but speaks it with less proficiency; wife, Vera Nikolayevna Streltsova, also works at Institute Biophysics.

HONORS

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21 January 1968

REMARKS

: No major changes in Moskalev's career since publication of above report; a recent document refers to him as head of a laboratory at Institute Biophysics; applied for visa June 1970 for four month's stay in US for meetings of United Nations Working Group on Effects of Atomic Radiation. 1969 published several papers (with coauthors Yu. M. Shtukkenberg, V. F. Zhuravlev, V. N. Strel'tsova, L. A. Buldakov, L. A. Kalmykova, L. A. Yerokhin, V. K. Lemberg): "Recommendations as to the Maximum Permissible Concentrations of Tritium Oxide in Industrial Environment," "Late Effects of Radionuclide Damage," ''Role of the Time Factor in Separate and Combined Injury by Cerium-144 and Plutonium-239", "Accumulation-Removal Patterns of Cesium-137 in Adult Dogs: Long-Range Experiment", "Remote After-Effects of Radiation Injury".

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COUNTRY USSR/Franco/Italy

REPORT NO.

OO- B-321/20573-70

SUBJECT

Second International Congress on Radiation Protection/Unimpressive Soviet Contribution/Lafuma's Work With DTPA at Fontenay-aux-Roses/ General Interest in Plutonium Protection

- -

DATE DISTR. 24 Aug 70

NO. PAGES 2

REFERENCES

DCS Case 54123
NAVINTCOM NIP-10-70
USAFAC/OTSG

DATE OF INFO. May 1970

THIS IS UNEVALUATED INFORMATION

- 1. The Soviet delegation to the Second International Congress on Radiation Protection arrived several days late. As a consequence, the only presentation from the USSR personally attended was a paper entitled, "Disorders in Embryonal Development of Rats after Injection of 131," by A M Lyaginskaya, Y D Parev and S N Sinitsyana. Since this same experiment has been conducted on the human embryo, there was really nothing new or even interesting in Lyaginskaya's presentation.
- 2. A Soviet delegate who was very busy asking many questions at virtually every session personally attended was Yuriy I Moskalev. Moskalev is a well known scientist in the fields of radioblology and radiotoxicity. He asked all of his questions through an interpreter, but when answers were given in English he always seemed to understand without benefit of his interpreter. Moskalev indicated to a US attended that the USSR was finally planning to request membership in the International Radiation Protection Association (IRPA).
- 3. The most interesting work presented at the meeting from a personal point of view was that of Professor J Lafuma, Fontenay-aux-Roses, France. He is charged with the responsibility of setting the plutonium protection standards and removal techniques after exposure to plutonium for all of France. Lafuma's most impressive work involves the success he has had in removing copious amounts of plutonium and other transuranium products from humans using DTPA.
- 4. Lafuma explained that from his point of view he was concerned with only two primary aspects of human contact with plutonium, inhalation and wounds. His studies have shown, of course, that the earlier treatment is begun the better the results; but also he has found it easier to decontaminate an area of the body exposed to plutonium through contact or a wound than to remove it from the lungs. Lafuma has used intravenous injection exclusively for the treatment of wounds and finds that a very significant amount of the transuranium particles are discharged from the body in urine. For the treatment of inhaled particles, Lafuma has used both DTPA aerosols and injection. He find his results from injection are better than the use of aerosols, even in lung decontamination.

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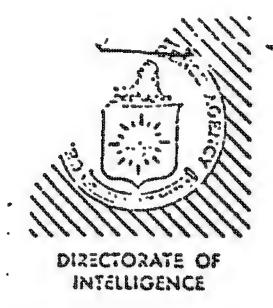
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COUNTRY International/USSE

REPORT NO.

00-8-321/17309-70

SUBJECY Second Congress of the International Radiation Protection Association, Brighton, UK, 3-3 May 1970/Biology and Ecology of Polonium and Radiolcad Conference, Sutton, UK, 30 April -

1 May 1970/Current Research and Findings

DATE DISTR. 1 Jul 70

NO. PAGES 2

REFERENCES DCS Case 54,123

NAVINTCOM NIP-10-70

DATE OF INFO. May 70

THIS IS UNEVALUATED INFORMATION

- 1. A US radiation biology researcher attended both the Biology and Ecology of Polonium and Radiolead Conference, Sutton, UK, 30 April 1 May 1970, and the Second Congress of the International Radiation Protection Association, Brighton, UK, 3-8 May 1970.
- 2. The nature of the Sutton meeting was such that few significant scientific positions were taken: however, in general, the duality of the paners was very high. The scheduled Soviet participants P V Ramzayev and FNU (Soskalev were presumably not permitted by the USSR to attend: D Panov (Yugoslavia) was in the US, and D Djuric (Yugoslavia) did not attend for unknown reasons. The countries represented were UK (26), Italy (5), France (1), Sweden (2), Poland (1), South Africa (1), and the US (7).
- 3. To the extent that the proper "half-life for lead in man" was discussed, the consensus appeared to be that (a) the loss rate can not be represented as a single exponential; (b) the presently available data on baboons and beagle dogs does not extend for a sufficient period of time to provide a measure of the "last slow rate loss constant"; (c) it is likely that lead and radium loss rates will differ because of the selective reutilization of Pb in bone. D Barltrop (UK) and US researchers have been performing experiments which indicate that lead is not bound by red cell membranes, but at sites in the cell interior.
- 4. CR Hill (UK) provided a useful summary of the contribution of polonium to human radiation dose. He stipulated that the distribution of polonium will depend on whether it is administered as polonium per se or is allowed to grow in an animal as the daughter of an ingested parent. This is a significant consideration to biological researchers engaged in dose calculation work.
- 5. Twenty-nine countries and five international bodies were represented at the Second Congress of the International Radiation Protection Association.

 W.G. Marley (UK) was the congress president and H. J. Dunster (UK) was the secretary of the scientific program committee. The congress shared the common problems and advantages of similar large meetings. Concurrent sessions inevitably brought about some conflicts in important papers, discussion was generally absent or quite limited, and there was the usual number of papers given in "broken" English by foreign scientists.

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CENTRAL INTELLIGENCE AGENCY

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CC-VTROLLED DISSEM

C-O-N-F-I-D-E-N-T-I-A-L

NO DISSEM ABROAD

COUNTRY

USSR/West Germany/France/Poland

REPORT NO.

00-B-321/27474-67

SUBJECT

14-00000

Y I Moskalev's Paper on Delayed Effects of Bone Seeking Radio Nuclides Disappointing/Personality Notes/Attempt to Propagandize at West German Scientist's Expense/France and Poland Fail to Par-

16 OCT 67 DATE DISTR.

NO. PAGES

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REFERENCES

DCS Case 49,991

Sep 67 and earlier DATE OF INFO.

THIS IS UNEVALUATED INFORMATION

- I was quite surprised when I arrived in Sun Valley, Idaho, to participate in the International Symposium on Delayed Effects of Bone Seeking Radio Nuclides to find that Dr Yuriy I Moskalev of the Institute of Physics. Moscow, had arrived two days earlier. Moskalev had traveled alone to Sun Valley and apparently was able to use his knowledge of the English language. to get along on his own. However, he complained to the chairman of the conference that he did not know enough English to read his paper which also required condensation because it was too long for the time allowed. colleague who had known Moskalev from earlier meetings said Moskaley's knowledge of English improved greatly after a few drinks. However, during this conference, he did not drink at all. He did mention, however, that he had written the English version of the paper he presented himself and said he could read and write English quite well but was deficient in the spoken language.
- 2. Moskalev's paper concerned the results of a series of experiments utilizing an unusually large number of rats and mice. The numbers he used were far in excess of those that would be used in a western laboratory. These figures were undoubtedly meant to impress his western associates. The data he presented was primarily on Strontium 90. His findings indicated that Strontium 90 was much more toxic than had been reported anywhere in western literature and that it was more carcinogenic than has been previously reported. His technique was almost exclusively injections of radio nuclides. The control he had on his animals was not explained, but very likely was very poor. He claims to have been able to induce cancer in laboratory animals at permissible exposure levels for atomic workers in the US. The animals were not examined for radioactivity, only for the existence of cancer. A respected US scientist with much more experience than Moskalev flatly stated, in private, that he did not believe Moskalev's findings. Moskalev did not ask questions during the question periods. However, he did talk privately to several scientific reporters after their presentations.
- Heinz Spiess West Germany reported on the results of in-3. jections of Radium 224 made during World War II in a wide section of the population in Germany. At that time, there was a mistaken belief that Radium 224 had a very beneficial effect on a person's health. He reported on 242 cases in which all types of cancer were appearing. The results of his observations in human population exposures were very similar to experiments 1

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YES.

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YES

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00-B-321/27474-67

on dog populations in this country. Moskalev made an attempt to make some propaganda of this report by asking in a small group, "Why did you do this?" almost accusing Spiez of doing it himself.

- 4. Moskalev left the conference a little upset. It was suggested that he might visit a US laboratory en route home, and considerable time was expended to arrange this visit. However, he apparently took a different route and made no effort to tell anyone of his plans, and he did not visit the laboratory. He took copious notes on all papers, which indicated he was understanding what was going on. He took many pictures with a 35mm camera. From the questions he did ask in private, it was obvious that he understood English well.
- 5. I understand a Polish scientist had been invited to the conference. However, when his paper was submitted, the reviewer criticized it quite severely and suggested changes. As a result, the Polish scientist apparently decided not to attend the conference.
- 6. Three French scientists asked to be invited when the symposium was first announced. They even gave titles to their papers and the papers were put on the program. However, they later withdrew and no French scientists attended the meeting.

Headquarters Comment: The analysis of Moskalev's paper in this report conflicts with the analysis in report 00-B-321/30340-6]

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NO DISSEM ABROAD

USSR COUNTRY

REPORT NO.

OO_B-321/30340-67

SUBJECT

14-00000

Second International Symposium, "Delayed Effects of Bone Seeking Radionuclides", Sun Valley, Idaho/

DATE DISTR.

16 OCT

NO. PAGES

Interesting Paper Presented by Soviet Yu I Moskalev, an Unscheduled Partici-

REFERENCES

(351)

DCS Case 49,99

pant

DATE OF INFO. Sept 67

THIS IS UNEVALUATED INFORMATION

- I attended the Second International Symposium on 'Delayed Effects of Bone Seeking Radionuclides', Sun Valley, Idaho, 12-14 Sept 67.
- An interesting paper was presented by Yuri I Moskalev. USSR on "Some Late Effects of Radionuclide Damage". Dr. Moskalev was not expected at the meeting and he came alone, arriving two days early. He had
- I was unaware that research such as he presented was being done in the USSR. His demonstration was a good piece of scientific work, that is, his procedures and results in pathological consequences of radioisotopes fit reasonably well with our procedures and results in the US. He did not present anything new in his paper, and it must certainly reveal that they are a few years behind the US in biology and radioisotope studies and applications. They are apparently still testing the toxicity of radio elements, which we have already established and accept, knowing the effects and using them accordingly. In other words, we are through with his reported work, feeling that it is completed; apparently they are not. Else, they don't yet know the toxicity boundaries, are still experimenting along these lines, or are experimenting to see how much more they can learn. But his paper reveals remarkable . research.
- Dr. Moskalev understands English reasonably well, but speaks it less well. Therefore, his appearance alone at the conference was even more unusual.
- 5. I understand that Dr. Moskalev became very interested in visiting a certain US facility researching in his field of interest and pursued arrangements to visit there. His time schedule permitted the visit and permission to visit the facility was obtained for him from the facility and the US governmental clearances were also obtained. However, after all this was done, he "backed out", going to great extent to give the

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reason that the itinerary change was too much trouble for the US persons and authorities concerned, notwithstanding the fact that all change arrangements had already been completed, which facts he well knew. From the USSR viewpoint, he stated that no objections would exist, but I doubt that this was true. He was in Sun Valley four days; immediately after the conference he went to Salt Lake City, and then on to Montreal, Canada. His schedule allowed for several days in Canada, but he stated that he was leaving Montreal immediately for Moscow.

Headquarters Comment: The analysis of Moskalev's paper in this report conflicts with the analysis reported in 00-B-321/27474-677

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NO DISSEM AGROAD

COUNTRY

USSR/Yugoslavia/Poland

REPORT NO.

DATE DISTR.

SUBJECT

DATE OF

INFO.

Soviets at the Third International Congress of Radiation Research/Emphasis on Study of Radiation Effects on Large

24 OCT 88

Animals/David Shugar of Poland/Planning

NO. PAGES

00-B-321/15482-66

for 1967 International Symposium on Photobiology in Yugoslavia.

DCS Case 47146 REFERENCES

Responsive to: C-SI6-52537 Related to: FID-5901-N

Up to 3 Jul 66

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SOURCE A.

1. About one third of the Soviets expected at the (Third International Congress of Radiation Research put in an appearance. The papers were disappointing. In my opinion the Soviets are confining themselves to a narrow range of interests in their radiation research. 6002547 32 which was reducerned with ingested or injected radioisotopes a paper written by Yu I Moskalev and Y N Streltsova of the Institute of Biophysics of the Ministry of Public Health, USSR, did not impress me. A very poor reading marked the presentation of the paper prepared by A Tumanyan of the Gamaleya Institute for Epidemiology and Microbiology, Acedemy of Medical Sciences of the USSR. The paper was given in a hurried and garbled fashion by a person who obviously was not a scientist. After the session ended, I talked to Tumanyan regarding her radiation experiments with monkeys. A woman about 45 years of age, Tumanyan had no English but spoke excellent French. She was quite enthusiastic about her work which I in turn considered commonplace. 5608366 pulle

It appears to me that the Soviets have a strong tendency toward experiments that enable them to study radiation effects on large animals. They do not seem interested in radiation response — the effect on tissue; on the other hand, they concern themselves with metabolic effects; which are important because they are related to the ability to suppress immunity mechanisms. They stress immunology and transplants.

SOURCE B.

KERKIS 6000332 Session 8, which was devoted to the discussion of radiation effects on cells, had but one Soviet paper. This was presented by J. J. Kerkis of the Institute of Cytology and Genetics, Siberian Department of the Academy of Sciences of the USSR, Novosibirsk. It was a poor paper.

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00-B-321/15482-66

- The meeting gave me an opportunity to renew my acquaintance with David Shugar of the Warsaw Institute of Biochemistry and Biophysics, Academy of Sciences of Poland. Though a highly competent scientist and a dedicated Communist, Shugar seems to be short of funds. The organizing committee of the Congress sent him money to insure his presence at Cortina d'Ampezzo. He and his wife drove by automobile from Poland to Italy. Shugar introduced me to one of his students K L Wierzchowski. In performing the introduction Shugar declared the young man was highly capable and had a brilliant future.
- 5. The International Committee of Photobiology had an executive committee meeting at Cortina d'Ampezzo. It was decided to hold a photobiology symposium in the late summer of 1967 on the Island of Hvar, Yugoslavia. The symposium will emphasize photosynthesis. The general plan calls for participation by about 100 scientists, with emphasis being placed on invitations to the younger scientists in the Sov Bloc. The chief organizer of the forthcoming symposium is Maria Drakulic, Laboratory of Cellular Biochemistry, Institute "Rudjer Boskovic", Belgrade.

- end -

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U. R. S. S.

The following contains photos and bio information about the delegates to the XI International Congress of Radiology, held in Rome Italy 22-28 Sep 65.

50: 00-3-324/18689-65 Case 46424, UNCL.

GORISONTOV, Petr D.; Prof. M.D.

Member of the Academy of Medical Science
of the USSR;

Two Orders of Lenin and Order of the Red Banner
of Labour;

Institute of Biophysics Academy of Medical Science, 14 Solyanka, Moscow. AN CEN

IVANITSKAYA

IWANITSKAYA, Maria A; M.D.Sc. Head of the Roentgenological Department, Institute of Cardio-Vascular Surgery; National Delegate; 8 Leninskij prospect, Moscow.

KOROGODIN, Vladimir I.; Ph. D. Institute of Medical Radiology, Obninsk; National Delegate Kaluga Region.

KOZI.OVA, Anna; M.D. Professor;
National Delegate;
7 Solanka, Moscow.

LAGUNOVA, Irina G.; Prof. M.D.
National Delegate;
7 Solianka, Moscow.

MOSKALEV Yuri L. Prof. M.D.

Order of Lenin; Institute of Biophysics Academy of Medical Sciences of the USSR, 14 Solyanka, Moscow.

REINBERG, Sam A.; M.D.Sc.
Professor, Director of the First Chair of Medical
Radiology;
Postgraduate Institute (Central) in Moscow;
Honorary President and Member of 22 Societies
of Radiology;
President of the Moscow Society of Radiologists;
National Delegate;
Moscow A.55, Novoslobolskaja 57/65, K U 37.

Candidate of N' dical Sciences; Chief of Division of Med. Radiology, Deputy Chief of General Department for Medical and Prophylactic Service, Ministry of Health;
National Delegate;
3 Rachmanovski, perculok, Moscow.

SEMENOU, VICENTY A

UGRJUMOV, Benjamin; Prof. M.D.

Director of Neurosurgical Institute;

National Delegate;

12 Majakovskaja Stard, Leningrad.

ZEDGUÉNIDZÉ. Georgii: Prof.

Académicien,
Membre de l'Académie des Sciences Médicales
de l'URSS;
Président de l'Association Scientifique des
Radiologistes de l'URSS;
Délégué National;
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URUGUAY.

GORLERO ARMAS, Agustín A.; Méd. Cir. Rad. Universidad, Facultad de Medicina de Montevideo; Jese de Servicio de Radiodiagnóstico; Jese del Servicio de Radiología del Hospital Italiano Umberto I; 1480 Calle Yí, Montevideo.

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KASDORF, Helmut; Dr. en Med.

Profesor Agregado de Radiología de la
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C-O-N-F-I-D-E-N-T-I-A-L

COUNTRY USSR/International

REPORT NO.

00 - B - 3,288,475

SUBJECT IAEA Symposium on Neutron Irradiations,

DATE DISTR.

Brookhaven, Long Island, NY, Oct 63:

23 Jan 64

Neutron Irradiations Compared to X- and Gamma Radiations in Large Animals; the

NO. PAGES

10

Problem of Neutron Depth-Dose Relationships in Large Animals; Problems with the term "Relative Biological Effectiveness"; Soviet

REFERENCES CD/00 Case 41357

Proposal for Supplanting "Rad" with Some

FID-5462-N

Other Radiation Unit INFO.

THIS IS UNEVALUATED INFORMATION

Source 1

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- Did Symposium contributions include significant advancements in research on controlled thermonuclear reactions that may be useful in determining the feasibility of initiating uncontrolled thermonuclear reactions solely without the use of fissionable materials which would produce large amounts. of energy, on the order of one kiloton or greater?
 - A. To the best of my knowledge there was no formal discussion of any nuclear reactions, as such. The great majority of the material presented had to do with biological effects, and the physicists at the Symposium were using high energy machines largely to produce the radiation that' would be comparable to solar flare radiation.
- Was anything presented on effects of space radiation on the human body?
 - The first term of the second o I can recall no Soviet references to the Vostok flights. The two Soviet speakers confined their references to purely laboratory observations. There was a number of US papers, and as I recall one from France, oriented to space flight conditions, however.
- Were there results in the use of drugs in radiation protection?
 - "I do not recall anyone's discussing drugs-Soviet or other. And I think that although research in drugs is continuing many radiobiologists are not very optimistic about their value. This is something many of us have reservations about.
- Was anything presented on the characteristics of a bio-element used for space radiation detection including the number required for an extended space probe and the method of transmitting information.
 - A STATE OF THE STA I do not recall any discussion of this by anybody. Practically everyone was talking about physical measurements

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- is something on which I can speak somewhat as an expert. Although people may claim to have this, I do not think anyone has it, alming the Soviets. One can find biological criteria at low doses, that her they have meaning beyond the limited experiment is the big ration, you see.

results presented on cosmic and Van Allen belt radiation effects on the containing in such areas as lethal, metabolic, developmental and metabolic?

.Natition.

- conclusions presented on determining the relative biologic effective-
- Action, I can speak with some certitude. There is no conclusion about the relative biological effect of this factor. People will argue about it, but there is no conclusion. The Soviets had some things to say about it, but I was thoroughly confused about their position. There are two ways of thinking about the RBE factor. One is from the viewpoint of theoretical biology which is interested in the why of differences of biological affectiveness, and this becomes one of the parameters of experiment. The other is the question of an empirical number that one can use in handling durations of judgment about radiation exposure in man. With regard to the questions of judgment, I think that most biologists would agree that we do not have any reliable and valuable RBE factors. We have numbers that represent what we might be afraid of, more than anything else.

Did the deviets say anything bearing on physical measurements of radiation in space in terms of relative biological effectiveness factor and inplications for future manned space flights?

One of the Soviet delegates, [Yu.I] Moskalev was a frequent commentator on other people's work and he made a practice of denigrating the reports of these people with respect to radiation lethality. His comment was to the cirect that the studies of radiation lethality done usually in small maintals were not to the point, were not germane to problems in the imman case, and that to be useful these studies should be done in animals closer to man.

- . !: hat is your critique of his argument?
- laboratories and we are beginning to get certain generalities about the nature of radiation injury, or at least certain kinds of radiation injury, and therefore I think it is worthwhile to pursue it. As you wight imagine, I presented a paper on radiation lethality and was among those to whose work Moskalev objected.
- Do you think Moskaley's objections were motivated from anything more than a genuine scientific position?
- to effects in the central nervous system—they are very interested in this and US people have tended to ignore this area. So conceivably workalev is oriented to CNS work and physiological functions, I do not know. But quite a lot of the Soviet work has a different orientation from western work—at least their published stuff.

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- 10 discussion, indicated that he was very sharp, very advanced in his knowledge of the biological effects of radiation, particularly with respect to distinguishing among the effects of various energies of neutrons and the techniques for measuring these energies. I think it may be safely assumed that the Russians are using very advanced methods for detecting and measuring the various energies of neutrons—the dosimetry of neutrons. In the biological effect, I think they are way behind us. But they are much involved in the potentials of neutron irradiation and their objectives are, I am sure, the effects of space radiation on human beings.
- 25. Actually, [V P] Afanas'yev, who is a physicist, was even more sophisticated than Moskalev. Afanas'yev's paper was entitled "Production and Investigation of Dose Fields for Irradiation of Experimental Animals with Protons of High Energy". His paper showed that both their production of high energy protons in the laboratory and the measurements of these protons with respect to animal work is sophisticated. They are advanced in this. I think this is the distinction to be made: they are more advanced in the technology of producing high energy radiations and the measurement of these than they are in biological effects of radiation.
- 26. Q. Was anything reported on effects of radiation on non-regenerative tissues such as the brain?
 - A. The Russians are very much involved in CNS effects of radiation, but they presented no data at the Symposium. The paper that Moskalev gave was a survey of Russian research work on biological action of neutrons and isotopes. It covered maybe twenty different pieces of work with only a few sentences for each. It presented no new data and nothing on the CNS as I recall. Afamas'yev's paper, on the other hand, presented new data on the production of dose fields with high energy protons.
 - 27. One gets the impression that whereas Russians physics is mechanistic and quite indistinguishable from ours in that respect, Russian biology is impregnated with philosophy. Hoskaley, for example, spoke of how the body "adapts" to radiation in the sense that a single animal adapts. Most biologists will reserve this word to changes in a species over a very long period. I suppose you could consider wound healing as adaptation in a sense. But western biology sees certain events occurring in an organism as the consequence of a wound which can be described without resort to notions of teleological adaptation. This philosophical tendency has been a damaging element in Russian biology, I believe.
- 28. Q. Here there results in the use of drugs in radiation protection?
 - A. I can recall nothing on protective drugs from anybody. There was here and there a reporting of drugs used to enhance the effect of radiation with respect to tumor treatment.
- 29. Q. Was anything presented on the characteristics of a bio-element used for space radiation detection including the number required for an extended space probe and the method of transmitting information?
 - A. I am afraid I do not understand the question's
- 30. Q. Vas there anything on biological indicators at low ranges of radiation doces?
 - A. There is a tremendous amount of interest in such indicators everywhere.

 Loskally's presentations did not say anything specific except that the

 Russians are working on long-term effects of small doses of radiation

in fact Moskalev asked me a question following my paper on carcinogenesis.

said nothing on acute, short-term effects of low doses of radiation,

presumably they are not concerned with these.

- It is proposed from other countries, and particularly the US, reported work is ving to do with low dose effects and reliable biological indicators for low ranges of dose using the chromosome aberration methods in human calls. But the Russians had nothing to say about this particular thing and seem not to be working on it as yet.
- in your opinion, what is the level of accomplishment, worldwide, in this latter of getting reliable indicators of biological damage?
 - Insofar as I know, the most sensitive and reliable biological index for damage at low dose rates involves the study of chromosome abnormalities. The approach was developed in the US and is being used extensively here and in England, and other countries are taking it up. Moreover, I think that in radiobiology in general, in almost any question you could ask, the west and particularly the US and England are very much in the forefront. From what I know of Russian radiobiology from translations and learsay, the Russians are years behind us, but I exclude their related physical work from this judgment.
- 33. Q. Mas there reporting from the Soviets on types of radiation detection equipment used in the Vostok flights? Did they report findings on the relative biological effectiveness factor values for neutrons, protons and cosmic ray attenuations?
 - A. Well, again, there was no specific mention of this, but the interest in the relative biological effectiveness factor for neutrons and cosmic radiation was a major concern of the whole Symposium: the attempt to slucidate the FBE factor and particularly the problem with respect to large animals, like humans, where in the case of neutrons you have a change in the type of radiation in the interior of the animal. You do not have this change with x- gamma rays, but you do have it with fast neutrons.
- 34. Q. How is this neutron change manifested in large animals?
 - A. The neutrons become moderated. As they proceed through the tissue, the hydrogen in the tissue reacts with the neutrons and there is a change in the energies taken up. At some point you have gammas. So, the first few layers of hydrogenous material on the outside of the animal tend to change the dose, and in the interior, where the important effects occur, you do not know what the dose is. We talk about mid-line doses, average doses, but the actual dose in the cells of the bone marrow or the gut, we do not know yet. This is one of the problems of the RBE and a very big one.
 - 35. [A G] Searle of Harwell reported genetic effects of low dose rate neutrons in mice finding that there were as many if not more mutations with low dose rate neutrons than with high dose rate neutrons. His work is the first direct evidence of the cumulative effect of a prolonged, or fractionated, low dose of neutrons. You do not have such an effect with x- or gamma rays. If you prolong the dose with these, the effect will be very much less than it would be if you gave the same total dose in a single fast pulse.
- 35. Q. The neutron dose given gradually might have an even more damaging effect than if given all at once, is that it?
 - A. Yes. At least. But the matter is still delicate, for Searle's experiment was with mice and the question remains whether neutrons, as such, will

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get into cells in the interior of a large animal, such as a human being, or will be moderated and changed into gamma rays. The neutron RBE for mortality in dogs, as reported from my laboratory and Brookhaven, is around 1. For small animals like mice it is more like three or four. So there is this discrepancy, and it may be promising for large animal research. Harwell, my laboratory, and the Argonne National Laboratory near Chicago are now setting up to apply low dose rate neutrons in sheep. This will be new work and should have important results.

- 37. Q. Were results presented on cosmic and Van Allon belt radiation effects on test organisms in such areas as lethal, metabolic, developmental and genetic?
 - Λ. There was nothing on this as far as I know, except for a paper from the Donner Laboratory people at the University of California, Berkeley entitled "Some Biological Effects of 730 Mev Protons". This may simulate the kind of radiation that occurs in space and this is why they are playing around with it, you see.
- 38. Q. Were conclusions presented on determining the relative biologic effectiveness factor of biologic material when exposed to radiation from nuclear
 testing?
 - Λ. Well, this kind of interest is implied in work with neutrons. With neutrons there is this question of RBE and it was one of the major points of discussion at the Symposium.
- 39. Q. Did the Soviets say anything bearing on physical measurements of radiation in space in terms of relative biological effectiveness factor and implications for future manned space flights?
 - A. All I can say is that it is logical to suppose that this is what they are after: good physical measurements of radiation of a type that might be anticipated in space.
- 40. Q. Was there anything said on mapping and profiles for space radiation?
 - A. There was nothing on this.
- 41. Q. What interest have the Soviets shown in development and testing of nuclear power sources for thermionic power generators? Are the Soviets now applying such generators?
 - A. There was nothing on this.
- 42. Q. Did the Soviets report progress in radiation resistant materials and components for application to long space flight electronic equipment?
 - A. This Symposium was all biological, so there was nothing on this.
- 43. Q. Was there anything from the Soviets on methods of radiation shielding?
 - A. It was there by implication. The fact that they were talking about the investigation of dose fields, the radiation of experimental animals with protons of high energy, implies that they would be using some kind of shielding to get the animal exposed.
- 44. Q. This contribution would have been in Afanas'yev's paper "Production and Investigation of Dose Fields for Irradiation of Experimental Animals with Protons of High Energy"?
 - A. Yes.

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INFO. August 1963 REFERENCES Case-40178 . Guido-316 C-SI3-81,081 CSI/AECD FSTC/CCI:

L. The purposite on "Likological "ralth and Safety in "uclear laterials Mining and Militar in Vience, Justini: 26-35, Aug 63, brought together the pulestional milti-distipline groups concerned with the health and safely of people emposed to mealeur materials in mining and milling and the contial problem of public health from the waste materials in these indu. ...es. To may it pointed up the necessity of interstanding the work within each of these absorplines in order to their define the empouldes, dosimustry, matcholism and biblogical relations in people emposed to the nuclear and chemical meterials encountered in these industries.

- 2. Except for the Mistorical review of the pulmonary muligrancies found in the workers of the Schneekerg and St Joachimsthal mines and the epidemiological review of the Colorado Plateau with the suggestion of possible increase in pulmorary emphysema, fibrosis and cor pulmonale as well as malignumaies und some dysamesia of heir roots in these people, the meeting was devoid of any specific information with regard to health effects on humans.
- 3. We did not make detailed notes of the meting and are not prepared to summarful the papers, however, there were a few points of interest to us that we will mention in the folia.... paragraphs.
- 4. V A Service v of the USSM service that transmin tetrafluoride was less. torric dina uranyl nitrade in the same dose in animals. A P Covikova of the USER reported a decrease in blood cellular elements and an

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"lycomunia as the result of moderately los a chatory doses of mixtures of the omidus of branches is and fifth a also remarks from such exposures what expeared to be a unbabble emounential or page type of urinary uranium excremium function and their remembion of the uranium ortides in the lungs and concentrate lyaph areas. These amostica also allegedly caused a dererieration of conditioned reflexe: in their dogs but no pathological changes were found in the nervous serious at autoray. They did find actorate deserge in the purmonary mentions and are port numbital and modiasting lympe access the darage the core prominent in the dogs inhalled distance of exlics containing the highest per cent of Transum To . Our to, he to ten so stude the with a carcinoma of the lung and another bed atypical every antichanges in the lung. V ! Francisc of the SF reported that will convert plus radon exposures in animals can ed porte classical and poteclogical pulmonary demage than either silica or raion alone. In I had along of a the USSM reported on the body distribution and bird provided affects and numerous inheled radioisotopes with acute, see acute see deronic par'slogical changes in the lungs, lone wereous and livers. I wereouslive know so little about the effects of the radialrotopes of which he spoke that we don't know whether this was new monder; or we.

- 5. J Lafuna from France reported finding on rador day for in a cleve dog attached by a cross blood circulation expertment with a mourar dog inhaling radon. Padon daughters were house in the lung of the master dog. The Yugoslavians reported confirmator information of finding the immediate radon daughter attached to dust dominious and they stressed the importance of determining radon daug area in the environment in order to calculate dipla lungdones. The receipt l' Poble reported studies of people and admale exposed to reder in their spas and found a high lung recention of radom daughters and that the hisauth daughters of radon were more readily exercited by and indexes them the lead daughters. In this later of the strong years a fine account on the function of mass mean thereter one commical constitution of large time dust with relation to hang retention. Printing of Free an general interesting theoretical discussion on the effort of the thickness and physiologics activity of the bronchial machous and he on altha long doses. of the US gave a rheorement discussion of the expected neighbor cod alpha dose from a point source. Reference of infilmal unfortunately was not plasent to give or discous the wear on the finding of radioles in the lair and mails of uraning shorts and his hapothetical evaluation of Lead 210 body burden theretron.
- daughters in uranium mill by more on the secular disequilibrium of uranic time-neighted exposure to me our new in ralle the a frequency of sandle for 95% confidence exception or not a maximum allocable concentration. He detected no new ideas is most of the new as on environmental exposurant internal and external contagnation from Japan, France and Canada.
- 7. E C Hyatt of the US, is a loss described the techniques for measuring and sizing radioactive descept restance again that the particle sizing and density of radioactive lasts one lessely important in evaluating biological effects. It was generally reced in the section on "radio-logical Protection" that voitilation we most important in controlling radon and radon-daughter products in soming atmospheres and that was a have only a special limited use in desponarily uncontrolled areas of exposure. The USS" sciencesta, however, paid unusual attention to Mr. Hyatt's paper on respirators and second quite concerned about the acceptability by workness of the described respirators. The Bussians apparently are using disposable masks.
- 3. Management of wastes appears to be a unique public for the areas in which wastes occur. No quaeral management of wastes was promoted.

CENTRAL INTELLIGENCE AGENC

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Austria/USBR/International/Delgium/Succen REPORT NO. COUNTRY

Symposium on Radiological Health and Safety DATE DISTR. SUBJECT in Exclear Materials Mining and Milling Held in Vienna 25-31 Aug 63 Under Amplices

Di the International Atomic Energy Agoncy, NO. PAGES the International Laior Organication, and the

Morld Realth Organization (IAEA-ILD-IID)/USCR Research and Practice in These Subjects As REFERENCES

DATE OF De l'Emergie Mucleaire, Rol, Belgium; (2) Division of Radiobiology, Research Institute of Marional Defense, Stockholm, Sweden, and (3) Fors-INFO. sverets Forskningsamstalt, Research Institute of Rational Delemse, Stocke PLACE &

THIS IS UNEVALUATED INFORMATION -

In late August 1963 I attended the Symposium on Radiological Realth and Salety in Nuclear Materials Minist and Millity held in Vienna. " Austria. The symposium was under auspices of the International Atomic Encray Agency, the International Labor Office, and the World Health' Organization. In carry September 1950 I visited related laboratories as follows: (1) Laboratories Du Centre D'Etudie Rucleaire, Mol. Bei-Jium; (2) Division of Radiobiology, Research Institute of National Defense, Stockholm, Sweden, and (3) Forsvarets Forskningsanstalt, Research Institute of Wational Defense, Stockholm, Sweden" ..

- Due to a misunderstanding in the USGR, the topics covered by the symposium were not known sufficiently in advance for Soviet scientists to contribute repers on other than auclear toxicology; Therefore, Soviet Delegate & Tschepnokov briefly discussed USSE uranium mine health practices which included three areas of activity: " (1) Maximum efforts are taken to suppress dust at the source, and mines are wellventilated; (2) Personnel protective devices, such as respirator; masks and filters, are used, and (3) Preventive health or prophylactic procedures include assignment of mine workers to a sanitarium for one month each year. No kidney damage or other pathology apparently has been seen as a result of uranium mining activities in the USSE. There was no mention of cancer due to this activity. Four papers' from the USSR dealt with laboratory studies on the toxicology of internal cuitters. Nost Soviet studies involved intratracheal administration of the isotopes -- although it was brought out that the importance of inhalation as a route of entry is being recognized. The symposium was brought together a world cross section of scientific disciplines for discussion of uranium mining and milling hazards. Details of all of this are given in my trip report which follows: and the second second second
- TAEA, ILO, and WHO Symposium on Radiological Health and Safety in Nuclear Materials Mining and Milling, Vienna, Austria, August 26-31, 1963. Visits were also made to the following laboratories:

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This is apparently due to the high acceptance of data pub-Lished by the University of Rochester. It was pointed out that the possible contribution of radioactive dust composed of other than radon daughters was not actually evaluated in the case of the Schneeburg lung cancers because dust samples were not collected. Although radon is released by crushing of ores, radon and radon daughters were not considered to be a problem in uranium mills of France because of large work areas and high ventilation rates.

- e. Four papers from the USSR dealt with laboratory studies on the toxicology of internal emitters in general, particularly Csl37, Sr89, Sr90, Y91, Cel44, Zr95, Ni95, Rul06, and uranium and radon. Most studies involved intratracheal administration of the isotopes, although a few inhalation studies were described. These papers were all given by Dr L N Burykina in the absence of Drs Moskalev, Sanotsky, Novikova and Rushmeva. They report that 10 to 18 per cent of the inhaled radioactivity was found in the lungs of rats and dogs after exposure, and that five per cent was cleared by ciliary activity. These data are difficult to evaluate since the particle sizes of the aerosols were broadly described as being between 1 and 4 M. Translocation of the inhaled radioisotopes was similar to that reported by others.
- Biological effects were reported only for intratracheal administration of Ce144 and Ru106. They report degenerative inflarmation of the lung and aplastic changes in the bone marrow accompanied by leukopenia in acute stages. In longer term studies they find chronic pneumonia and degenerative and proliferative changes of the bronchial epithelium and connective tissue. They also reported reduction of bone marrow hematopoiesis and degenerative changes in the liver, kidney, etc. These occurred after deposition of 1 to 19 uc Ce¹⁴⁴ in rats, 0.6 to 2.6μc Ce¹⁴⁴/gram of dog, and 0.4 μc Rul06/gram of rat. No cardiovascular changes were noted, but were not specifically studied. The results of studies with uranium were similar to those reported many times, with the exception of central nervous system injury which consisted of changes in conditioned reflexes and in hibitory and excitatory processes. Due to this and relatively high burdens found in skeleton (3 to 4 per cent) they conclude that uranium toxicity is not necessarily confined to kidney damage. Kushneva's paper on synargistic effects of silica and radon reported previously published data. Silicotic rats were exposed to 8 uc radon." The radon treated silicotic rata showed more serious clinical symptoms, drop in circulating blood cells, and more extensive lung pathology than rats treated with radon or cilica alone.
- An excellent paper describing experimental work on the inhalation of Rn²²² and its decay products was presented by Dr E Pohl from the University of Innsbruck, Austria. When Rn was inhaled in equilibrium with RaA, RaB, and RaC the concentration of daughters in lungs and other tissues were higher than when the concentrations of RaA, RaB, and RaC in the inhaled air were less than the equilibrium values. However, in the latter case the concentrations of daughter products in the lungs and other tissues were higher than would be predicted from the concentrations in the inhaled air. Further experiments are in progress to confirm and explain these results. Similar, but less extensive, studies were reported in a paper co-authored by Dr LaFuma of France C-O-N-F-I-D-E-N-T-I-A-I

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August 1963 INFO.

THIS IS UNEVALUATED INFORMATION

1. The Symposium on Radiological Mealth and Safety in Muclear Materials Hining and Hilling in Vienna, 26-31 Aug 63, did not provide much new information mainly because the US is so far ahead of the other countries represented at the symposium in its studies of these subjects. was actually the only country which presented original material at the conference. The Soviets sent a small three or four-member delegation Theaded by Yuriy Ivanovich Moskalev, a very personable and diplomatic gentleran. At the end of the conference, he voiced his dismay in all apparent sincerity, that the Soviets had misunderstood the exact point of the meeting and had presented very minor papers.

All the Soviet papers were read by V S Kusneva, a woman physician who delivered them very dramatically. The most interesting Soviet claims. which we do not believe directly applicable to the causes claimed and which were not fully documented were:

> that uranium effects the central nervous system, i e, causes certain changes in the Pavlovian reflexes;

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Is I attended the meeting of the Mari Renel or the familiator of Interested Ruddoniolides, Menas, 4 - 8 Jun 63. The purpose of the penal tree to advice the MAA on research program in this field. The methan was organized by Evgensy I. Momarov (USER) of the IIII Division of Tooters.

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1. Source identified a photograph of MOSALEVSKIY /not by name, nor was the name supplied of at Air Porce Colonel . and GRU officer is the Information Directorate of the GRU who attended a meeting in London in May or June 1961.

Comment:

- 2. Bo SR/6/Bio traces.
- Mintances report that Yurly Ivanovich a Conference on Electronics in London from 12 to 17 June 1961.

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C-O-N-F-I-D-E-1-1-1-4-1 6002547 USSR/Czechoslowakia/West Germany/India/ REPORT NO. COUNTRY France WWO/IMEA Scientific Meating on the SUBJECT DATE DISTR. 15 Jan (: Diagnosis and Treatment of Radio-Active Poisoning--Assessment of NO. PAGES Perticipants and Their Presentations/ Cu10: 323 Diegraphical Information REFERENCES

DATE OF INFO. 15-18 Oct 62

THIS IS UNEVALUATED INFORMATION

- 1. I participated in the World Health Organization's International Atomic Shargy Agency's scientific mesting on the discourse and treatment of radiocation poisoning; held at Vienna, Austria, 15-18 Cat 22. There were only 20 participants at this meeting; therefore each individual is considered highly qualified in this particular field otherwise he would not have been invited as a participant.
- 2. The two USSR doctors who were invited were Dr D J Somenov and Dr I T Transaction, a female doctor. They are both from Swandowsk Center. When the secretary had not heard from them, he contacted the parament USSR representative of the International Atomic Energy Agency, who called Moscow to find out whether or not these two representatives would abtend. He was informed that they could not come due to unforeseen circumstances. They sent incteed Prof

Moscaley. He speaks only Russian. He is bricht but not current on the effects of radicactive matals. He was therefore not the individual that should have been representing the USSR of this meeting. This was his first time out of the USSR. He is about 5'-8" tall, weighs about 175 pounds, is around 45 years of age and has graving heir. He is generally an outgoing individual. He became very warm and friendly during the meeting and toasted my son saying that he hoped that his some and my son could climb mountains together. He was rather gay at parties but only a social drinker. He smoked an average amount. He has a family, the size of which I do not know, and is a professor in the Institute of Medicine.

3. Professor V Volf, Department Tomizing Politation, Institute of Industrial Hygione and Occupational Discusses, Politavani 24, Prague 7, Czacleslovakui, is a well-known scientist. He is tall, slender, and athletic, in his 1900 30's, about 6 feet tall, speaks purfect Roglish. He has one boy aged 5 and a girl aged 9. He lives in Prague. Its publishes an annual report on the proceedings at his institute, which I receive. He is a top-notch scientist. He is an MD and sees patients in addition to conducting research. He stated

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Int'ntl Conf on Diagnosis and Treatment of Radioactive Poisoning Vienna 15-18 Oct 62

The most interesting aspect of meeting was conduct and contributions of Prof Yu 1 Moskalev of USSR Acad Sci. His subject was listed as "Uptake and Retention of Plutonium in Man"; no abstract was presented. When Prof Moskalev spoke, however, he changed the title to "Problems of Kinetics of Uptake and Retention of Radioisotopes." During his presentation, it was suggested that the retention of multiple dosis of Sr90 in the rat could not be predicted on the basis of single injection studies. After continual questioning via translation service (he apparently spoke no English), we concluded he meant by this that the rat is a continually changing animal. In any event, his paper presented nothing new and could by described as being rather elementary.

In contrast, Prof Moskalev's questions throughout the four day meeting covered a wide range of topics, and left one with the impression that he was a competent individual. In response to questions, however, his answers were far from satisfactory. He have no specific answers to questions regarding Soviet experience with radioisotopes in man.

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In 1953 tests were berun by MOSCALTV concerring the distribution of isotopes in various animal species. Work of the radiobiological installation at Sungul

SO: CIA, CS-G-EG-14 64, 25 Oct. 55, Secret.

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MCSKALEV -- assistant to Timofeyev, Head of Biological Dept, Sungul Institute. Loskalev, a narve physiologist and party man, worked with Catsch (and subsequently succeeded him) on research on curing or preventing radiation damage. (Source is Dr Alhelm Menke (STIB), a returned German scientist who gave inforfation on Soviet personalities at the Nuclear Research Institutes at Sukhwai, between 1945 and 1955.) SOURCE: CIA, CS-G-82811, 1 Mar 56, SECRET/NOFCRN RELEASABLE TO U.K./CONTINUED

MCSKAIEV, Yuriy Ivanovich - worked as a sci. asst. in source's lab. at Sungul. Took the position of chief of the pathophysiological lab. when source left in Oct. 53. Not well qualified. Was supposedly imprisoned during the war because of his German descent or for black market dealings. Became a Party member in 1951. Had one month's TDY at t the Biophysical Inst., Moscow during the last half of 52. Upon his return, he informed source that the inst. was doing intensive work on the hematological effects on dogs of . radiation exposure. The inst. was also working on radiation e'fects on the nervous systems of dogs, similar to the conditioned reflex experiments of Pavlov. He also stated that the inst. was doing parallel work to ungul on increasing the excretion of incorporated radioactive isotopes, using diuretic substances & hormones, particularly the parathyreotrope hormone. No special results were achieved. He was married to Vera Wikolayevna Streltsova. Age 35. Medium height. Dark blond. SO: CIA, CS-G-EG-1550, 24 Apr. 56, Secret joe

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